

University of California, Santa Barbara College of Engineering

Asia: New Opportunities for Technology Businesses

ENGR185E/285E, Spring 2007 & ENGR191J/291J, Summer 2007

Course website: www.tmp.ucsb.edu/spring07/engr185e

Faculty: Karen Smith-Pilkington CLASS: Mon. & Wed.,

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New Opportunities for Technology Business provides students with analytical frameworks for critically assessing technology business environments within Asia. It establishes an understanding of historical context; governmental structures, policy and influence; capability investments by local and foreign companies and their yield; operating models in leveraging China's and other Asian economies' resources and related experiences. It also assesses business strategy opportunities focused on sustainability in view of Asia's immense population, growth, and advancement.

China poses tremendous opportunity for large and small companies in terms of talent, market opportunity, commercialization, development, manufacturing and sourcing. China's growth, industrialization, urbanization and economic differences have produced staggering needs in energy, water, infrastructure and environmental capabilities. These challenges provide opportunities for entrepreneurial thinking, innovation and approaches to achieve a more sustainable future.

Participation in China requires knowledge of its history, business models and practices, government priorities and requirements. ENGR185/285E combines in-class knowledge building and in-country tour experience to assess China's opportunities and needs, and to see varying approaches by Chinese and foreign companies attempting to meet and leverage those requirements. ENGR 191/291J is limited to the in-country tour. Students selecting that class must first take ENGR185/285E or receive permission by the instructor.

Class Readings:

- Full Class Reading List:
 - o Ted Fischman, <u>China, Inc. How the Rise of the New Superpower Challenges America and the World</u> (Scribner, 2005)
 - o Donald N. Sull, <u>Made in China: What Western Managers Can Learn from</u> Trailblazing Chinese Entrepreneurs (HBS Press, 2005)
 - o Stuart L. Hart, Capitalism at the Crossroads (Wharton School Publishing, 2005)
 - James McGregor, One Billion Customers: Lessons from the Front Lines of Doing Business in China (WSJ Books, 2005)
 - o Articles: TBD
- Graduate Student Supplemental Reading List:
 - o Jonathan D. Spence, <u>The Search for Modern China</u> (Norton 2001)
 - o C K Prahalad, <u>The Fortune at the Bottom of the Pyramid</u> (Wharton School Publishing, 2005)
 - o Lester R. Brown, <u>Plan B2.0</u> (Norton 2006)
 - o TBD
- HBS Case Studies
- Profiles of Highlighted Industries/Companies/Ministries
- Speakers

Class Grading:

- Case Study Review, Preparation and In-Class Leadership by a Small Team (25%)
- Class Participation (25%)
- 5-7 Page Research Paper identifying one of China's core needs and related approaches by Chinese and foreign companies (25%)
- 3-5 Page Written Profile of one of the highlighted companies/industries (China-related opportunities, strategies, investments, execution) for sharing with the class (25%)

Industries/Companies of Interest and Issue:

- China Ministries: SEPA, MOFCOM, State Development and Reform Commission
- Chinese Chemical Industry and PetroChina, SINOPEC, etc....
- Chinese Chemical Industry and BASF, DuPont
- Chinese Oil Industry and CNPC, CNOOC, etc....
- Chinese Oil Industry and British Petroleum, etc...
- Chinese Coal industry, regional companies and China Coal Industry Association
- GE
- Kodak
- QAD
- Airline industry and Air China, Chinese Regional Airlines, United Airlines, etc...
- Airline industry and Boeing and Airbus
- Lenovo (formerly Legend and IBM PC) vs. Dell, HP, etc.....
- Haier: Domestic and Intenational opportunities vs. Whirlpool, Samsung
- Solar Power, Suntech Power Holdings Co., etc...

- Telecommunications industry and China Telecom, China Mobile, etc..
- BIRD
- Medical infrastructure development & GE, Siemens, Neusoft, Philips,
- Biotech companies and ambitions, Chinese vs. foreign
- Communications Infrastructure, Huawei Technologies, Corning, Lucent/Alcatel, etc...
- War for Talent and Heidricks and Struggles, KornFerry, Spencer Stuart, etc...
- Banking Industry and Bank of China, HSBC,
- Internet Portals, Sina, Sohu, Google, Yahoo, etc....
- Internet Commerce, Alibaba, etc...
- Agriculture

Class Outline:

Weeks 1 and 2:

- China Today: Overview
- Abbreviated History
- Government structure, policies and relations
- Industry structures
- Trade relationships
- Key understandings

Week 3:

- Sustainability
- China's growth, industrialization and resources requirements and risks
- Government actions
- Chinese company and MNC responses/initiatives (interactive)

Week 4:

- China: Technology development capabilities
- Intellectual property issues and related decisions
- Government support for critical capabilities
- Chinese company and MNC /experiences
- Speaker(s)

Week 5:

- China: Commercialization, sourcing and manufacturing capabilities
- Models
- Speakers reflecting different models

Week 6 and 7:

- China: Market opportunity
- Brand development in China by domestic and foreign companies
- Diverse markets/segments
- Distribution
- Case studies: consumer and commercial

Week 8:

- China: Source of new global companies
- Discussion of experiences and impact
- Case studies

Week 9:

- China: New market development and investment
- Internet and telecommunications, energy and healthcare based opportunities
- Speaker

Week 10:

- China: "War for Talent"
- Impact on companies
- Speaker