ME456-ECE495
“Entrepreneurial Engineering”
Spring 2005

History, Objectives & Structure

By
Andres C. Salazar
PNM Chair in Microsystems, Commercialization and Technology
History of ME 456

- First Course in Entrepreneurship to be offered in the US outside of a business school. (1984)
- Started by Bill Hughes (former UNM-SOE Dean) with substantial industrial experience.
- Offered in the ME Curriculum, taken by ME seniors, SNL staff and practicing engineers in local area.
Typical ME456 Syllabus: 1984-2000

Topics

• Invention, discovery and innovation
• Protecting your ideas
• Selection of a business concept
• Establishment of a project team
• Marketing and Finance for a business
• Assembly of a business plan
New ME456/ECE495 Course

• ME and ECE students integrated.
• New Syllabus Focuses on “Starting Your Own Company.”
• Project teams Formed with business plan assignments.
• Business Plan Requires a “product” be prototyped.
Who Should Take This Course?

• SOE students who:
  – Wish to join a high technology start-up in the near future;
  – Want to learn about small companies and how they utilize technology;
  – Really do not see themselves as “researchers” in their career plans;
  – Want to understand “real world” problems from a business & financial perspective;
  – Aspire to be technology managers sometime in their career;
ME456/ECE495 Possibilities

- ECE or ME seniors may be interested in combining work in senior capstone courses with this class.
- Product ideas for ME456/ECE495 course could come from local companies.
- Product ideas for ME456/ECE495 course could come from STC or from faculty/researchers.
NCIIA (National Collegiate Inventors and Innovators Alliance)

• Collection of Colleges/Universities Interested in forming Entrepreneurial Teams (ET’s)
• Conference held annually – March
• Sponsored by Coleman and Lemelson Foundations (contribute to entrepreneurship)
• Grants given to colleges for supporting ET’s projects
UNM Center on Entrepreneurship and Innovation (CEI)

- $16K NCIIA award given to CEI for support of ME456/ECE495 Course for 2 years.
- Award allows $500/E Team for product prototype construction. ($4K per year total or 8 teams/yr)
- Award allows $1500 for student travel per year (conference talk delivery)