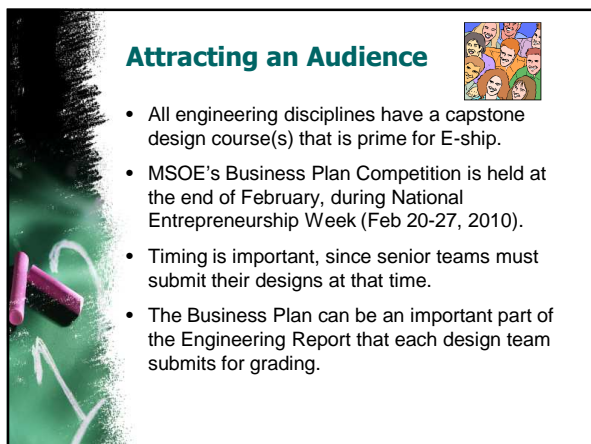


Agenda

- What are the basic elements?
 - Audience of student entrants
 - Capstone (senior) design students
 - Support
 - Sponsors (prize money)
 - Judges (alumni and friends)
 - Commitment for the future
- How does the BPC fit into the university?
 - Culture of entrepreneurship
 - Part of a national movement
 - Along with innovation and sustainability





Attracting an Audience

- All engineering disciplines have a capstone design course(s) that is prime for E-ship.
- MSOE's Business Plan Competition is held at the end of February, during National Entrepreneurship Week (Feb 20-27, 2010).
- Timing is important, since senior teams must submit their designs at that time.
- The Business Plan can be an important part of the Engineering Report that each design team submits for grading.



Business Plan Contents



- Product or service description
- Company profile & expertise
- Marketing plan
 - Market analysis
 - Competition
 - Pricing and distribution models
- Startup expenses (capitalization spreadsheet)
 - Cash flow analysis
- Ask the question
 - Offering debt or equity?

Sponsors



- Put up the prize money
 - 1st Place \$1,500
 - 2nd Place \$1,000
 - 3rd Place \$500
- The Kern Entrepreneurship Education Network
 
- The Uihlein/Spitzer Center for Entrepreneurship
 

Judges



- Ask select alumni to consider judging your Business Plan Competition.
- We use criteria from the Governor's Business Plan Competition for our competition.
- Prepare your judges well.
 - Give them criteria or rubric ahead of time.
 - Give them students' business plans in advance.
- Top 6 teams have the opportunity to "pitch" their plans to judges in person.
 - Timed, 20 minutes including Q&A.

Competition Winners at MSOE

In 2007, we had a tie for 1st place!



1st Place
(\$1,250/team)

2nd Place
(\$750)

3rd Place
(\$500)

FIT System, tied with **Walker - Gait Analysis System**

Vehicle Radio Recorder

Portable Electric Leaf Blower

In 2008, alumni also participated.

1st Place	Vince Anewenter	EcoDisc
2nd Place	Jonathan Weaver	Mad Hatter μ -Brewery
3rd Place	EE Sr. Des. Team*	ACE ²

*Richard Ehler, Jonathan McIntire, Kristen Wellhausen & Sylvia Wrate

In Celebration of National Entrepreneurship Week
RSOB Congratulates the Winners of the
Third Annual MSOE Business Plan Competition




The Prize Money is Awarded as Follows:

1st Place \$1,500	Parigat (Jagdeep) Monitoring Device Team Andrew Boshuis, BE Nathan Grams, BE Brian Wallace, EE
2nd Place \$1,000	Care Chaper... Arts & Motorsports Patrick McLane, ID
3rd Place \$500	Perfect Stroke Rowing Machine Chelsey Jelinke, ME Evan Kunnille, ME Joey Weed, ME Jason Yolo, ME

Read the full story in the Milwaukee Journal Sentinel at <http://www.jsonline.com/business/09221777.html>
 Find out more details at the MSOE Newsroom: <http://www.msou.edu/newsroom/detail.shtml?node=149776>



Special thanks go to the Kern Entrepreneurship Education Network (KEEN) who sponsored our competition. Congratulations to all the participating teams. A total of 30 MSOE students entered this year's competition. Watch for more info on next year's BEPC! If you wish to learn more about National Entrepreneurship Week visit: <http://www.nationaleweek.org/>.


Questions?



What is Entrepreneurship at MSOE?

E = I2C

**Entrepreneurship =
Innovation to
Commercialization**




What is KEEN?

- Kern Entrepreneurship Education Network
- Started in Fall, 2005 by the Kern Family Foundation with 10 grants of \$50,000 to 10 private engineering universities

Mission Statement:

"...instill an action-oriented, entrepreneurial mindset among engineering, science and technology undergraduates"

-<http://www.kffdn.org>



Who is in KEEN?

- First 10 schools started in 2006 (Cohort I)
- Second year, added 5 universities (Cohort II)
- Third year, 8 universities added (Cohort III)
- All are private universities, with accredited engineering colleges and schools of business

Who is in KEEN? (cont.)

- **Cohort I:** Bradley, Case, UDM, IIT, Kettering, LTU, MSOE, Ohio Northern, Valparaiso
- **Cohort II:** Calvin, Evansville, Marquette, Mercer, Villanova
- **Cohort III:** Baylor, Boston, Dayton, Gonzaga, Norwich, St. Louis, Santa Clara, WPI

What is the KEEN Objective?

ABET Criterion 3. Program Outcomes

Engineering programs must demonstrate that their students attain the following outcomes:

- (a) an ability to apply knowledge of mathematics, science, and engineering
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- (d) an ability to function on multidisciplinary teams
- (e) an ability to identify, formulate, and solve engineering problems
- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively (esp. to non-technical audiences)
- (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- (i) a recognition of the need for, and an ability to engage in life-long learning
- (j) a knowledge of contemporary issues
- (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.



Accomplishments

- Fulfill our first goal of establishing a place for entrepreneurship in our engineering curricula
 - *Biomedical Engineering is our pilot program*
 - *Computer Engineering is our next program*
 - *Electrical Engineering is adding electives*
 - *Software Engineering is adding electives*
 - *AE/CM and ME are considering adding Eship*
- Fulfill our second goal of providing support for interested students of all disciplines
 - *Entrepreneurs Club and other extra-curricular activities for students*

New Courses in Entrepreneurship

Three 1-credit courses

COURSE	TITLE	TOPICS
MS-3425	Entrepreneurship I	Overview, Finding a Market for Your Ideas
MS-3427	Entrepreneurship II	Developing the Business Plan
MS-3429	Entrepreneurship III	Financing the Venture


Two 3-credit courses

COURSE	TITLE	TOPICS
MS-2220	Found. Of Bus. Economics	Finance, Marketing, Accounting, etc.
MS-3423	Innovation and Bus. Mkts.	Combines 3 courses above



Entrepreneurship Modules

- Educational lessons on key elements of entrepreneurship:
 - *Ideation – Idea Generation*
 - *Intellectual Property – Patents, Trademarks, etc.*
 - *Market Research – Addressing Customer needs*
 - *Financing a New Venture – Bootstrapping, Angel Investing, Venture Capital, etc.*




Entrepreneurship Modules

- A collection of presentations and supporting materials (like learning objectives, in-class and take home assignments and test questions) addressing key elements of entrepreneurship has been developed by MSOE's entrepreneurship team.
- These "modules" are available for use by MSOE faculty members or they can be presented by a member of the team.
- Contact Chuck Tritt (x-7421, tritt@msoe.edu) for more information.




Existing Modules

- Introduction to Entrepreneurship for Engineers
- Introduction to Social Entrepreneurship (by student request)
- Intellectual Property and Patents
- Keeping an Engineering Logbook (companion to the IP module)
- Design and Development Planning
- Introduction to Market Research, Idea Generation and Planning
- Ethics in Entrepreneurship




Proposed Modules (1 of 2)

- Funding Your Entrepreneurial Venture
- Starting a Technology Venture
- Expanding a Technology Venture
- Exiting a Technology Venture (Profiting from Your Venture)
- Global Opportunities
- Invention to Venture
- Writing a Business Plan
- Making an Elevator Pitch



Proposed Modules (2 of 2)

- Entrepreneur Profiles (by discipline)
- Distributors (and/or Developing a Sales & Marketing Strategy)
- Development of Product Specifications (QFD Method)
- Being the Boss and/or Being Your Own Boss
- The Importance of Networking – Accessing Human Resources
- The Art of Hiring and Firing (and the Legal Implications Thereof)



More Module Information

- Most modules are sized to be presented in a single class period.
- The percentage of students indicating interest in entrepreneurship typically goes from about 10% to over 50% in response to the "Introduction" module.
- We are taking requests. If you have an idea for a module you would like developed for your class or program, contact us. We may be able to develop it for you.
