

# **Toward an Experimental Master's Program in Technological Innovation and Entrepreneurship: An Exploratory Proposal**

**With apologies for wholesale borrowing from Nov. 4 proposals and some later comments by:**

**John Reed**

**Dimitris Bertsimas: "The Ecole Polytechnique Model"**

**Steve Graves: "MIT's Management School"**

**Alex d'Arbeloff, Roberto Fernandez, James Orlin & Anjali Sastry:  
"Practice and Projects at Sloan"**

**Dan Ariely & Steve Eppinger: "Technopreneurship: Learning while  
Doing"**

**plus SloanSpace comments by Erik Brynjolfsson**

**I take the blame for my interpretation and attempted integration.**

**Ed Roberts**



# Design Philosophy for a Master's Program

- Change and reposition Sloan by building upon MIT's strengths in and population of undergrads, grad students, alumni and faculty engaged at the forefront of science and technology. A large subset of them, plus many others initially educated outside of MIT, would enthusiastically seek to focus their careers in technological entrepreneurship and in leading product/service innovation.
- Enable undergrads and grad students from MIT Science and Engineering programs to receive a Sloan Master's degree in one concentrated year, provided that they have taken additional Sloan courses while in their science and engineering studies.
- Attract similar students (early to mid-20s, with science/engineering education) from the outside world to complete same Sloan Master's degree in two years.
- Consider "packaging" the degree by aligning with MIT special interests/strengths, as was done by the Leaders For Manufacturing Program and the Biomedical Enterprise Program and the Financial Technology Option. This should be attractive and sensible, while streamlining the receipt of dual Master's degrees or Science/Engineering PhD plus Sloan Master's.

# More Design Philosophy for a Master's Program

- Heavy emphasis upon learning by doing, “mens et manus”, in project teams, to better experience the practice of management:

Requirements include:

- Participation in at least one \$50K team during program;
- At least one entrepreneurial company project course: E-Lab or G-Lab;
- At least one real development course: Product Development or Innovation Teams;
- Integration of “leadership development” into these “practice” experiences.

Supplement our faculty with alumni and others as coaches/mentors.

- Significant revisions of current core to facilitate focus upon technology development, product/service development, and new company startups.

Needed new subjects to be developed:

“Introduction to Technological Entrepreneurship”, to be taught jointly by tenure-track faculty member and experienced adjunct faculty;

“Product Development and Product Management”;

broadened version of present “Innovation Teams” subject that will enlist commercial development partnerships with MIT labs/centers in addition to the Deshpande Center.

All other needed subjects already exist.

# How to Move Forward with This Experiment

- Establish task force of faculty advocates from across the Sloan School to work out detailed program design.
- Prepare for launch at the level of 50-60 students by September 2007.
- Test and evaluate for 2-3 years before attempting scale-up of size.