The Gordon Engineering Leadership Program at Northeastern University

Background

In 2006, the Gordon Foundation, established by engineering innovator and philanthropist Bernard M. Gordon and his wife, Sophia, provided a generous $20M gift to Northeastern University which was intended in part to support the development of a new educational initiative: The Gordon Engineering Leadership Program at Northeastern University.

Description

The Gordon Program is an intensive one-year graduate program that educates participants in the essential skills and knowledge required for them to assume leading roles in technical projects or programs. The Gordon Program trains graduates, called Gordon Fellows, who constitute a cadre of technology drivers adept at envisioning new engineering products and skilled at leading multidisciplinary teams to bring their ideas to market.

Through completion of the Gordon Program courses and the Challenge Project, Gordon Fellows will have earned a Graduate Certificate in Engineering Leadership. With the completion of 4 graduate-level technical courses at NU’s College of Engineering, Gordon Fellows can also obtain a Master’s Degree in the engineering field of their choice.

Gordon Fellows are employees of their sponsor organizations and tuition and fees are paid on behalf of the Gordon Fellows who also receive a salary or graduate stipend.

Major Components of the Program

- Gordon Program Courses
  - Engineering Leadership (4 Semester hours)
  - Scientific Foundations of Engineering (4 Semester hours)
- Challenge Project developed with Corporate or Government Sponsor
  - Thesis-equivalent project and presentation (8 Semester hours)
  - A project that is of key strategic importance to the Sponsoring Organization
- Gordon Program Mentoring
  - Program Mentors who have demonstrated track records of leading major engineering projects in industrial settings
  - Faculty Mentors who can provide guidance and direction in fundamental research areas
- Technology Leadership Seminar Series
  - Technical Leaders share experience in advanced technology product development
  - Discussions of career path, lessons learned, critical decision points, future challenges
- Technical Graduate Courses (16 Semester hours / 4 graduate courses)
  - To receive a Masters Degree in addition to the Graduate Certificate in Engineering Leadership

Challenge Project Development

A detailed Challenge Project plan will be drawn up by the Gordon Fellow with the support and guidance of his/her Gordon Program Mentors, Faculty Mentor and Sponsor Mentor. As the Challenge Project will be completed within one year, there will be specific deliverables throughout the year to make sure that the Gordon Fellow is making satisfactory progress towards the deployment of technology and exhibiting scientific knowledge commensurate with a technical Masters Degree requirement.

A twenty page Challenge Project Proposal is due at the end of December consisting of:

- A Technical Description, including a state-of-the-art technology assessment
- A Discussion of Key Scientific Principles
- A Milestone Schedule
- A Market Assessment

A forty page Challenge Project report must be submitted in early August and a final presentation is made by the Gordon Fellow at the end of the semester.

Gordon Fellow Sponsor Organizations

- US Army Night Vision Lab
- Air Force Research Lab
- Analog Devices
- Bose Corporation
- CipherTech
- GE Healthcare
- General Electric Propulsion
- IBM: Intelligent Medical Implants
- NeuroLogica
- Pacific Northwest National Laboratory
- Physical Sciences, Inc.
- Raytheon
- Textron

For More Information

See our web site: http://www.censis.neu.edu/gordonfellows/ or Contact Kristin Hicks at khicks@coe.neu.edu or at 617-373-5384.