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ENGINEERING LEADERSHIP AND INNOVATION MANAGEMENT

Graduate Program Head David Mazyck

Program Code ELIM

 Campus(es)
 University Park (M.Eng.)

 Degrees Conferred
 Master of Engineering (M.Eng.)

The Graduate Faculty View (https://

secure.gradsch.psu.edu/gpms/?searchType=fac&prog=ELIM)

The program is designed to develop the attributes required by today's successful engineering leaders. Specifically, these include increased technical competency, expanded professional skills, the ability to identify opportunities for improvement, and the acumen to work effectively in a globally connected engineering environment. Upon completion of the full one-year program, the successful student will have developed and demonstrated abilities enabling them to:

- Evaluate leadership and innovation management strategies for corporate innovation and identify opportunities for new products and businesses in alignment with an organization's strengths and weaknesses within an existing business structure.
- Demonstrate an understanding of cultural and international boundaries, effectively considering the implications of cultural and international business differences on project implementation.
- Employ design thinking and project management strategies to lead engineering teams in solving complex engineering problems.
- Apply project management methods including the implementation of techniques for planning, scheduling, budgeting, and controlling project performance.
- Demonstrate proficiency in oral and written communication appropriate to engineering leadership and innovation management.
- Develop self-awareness of personal leadership attributes and areas for growth in fostering cultures of innovation and creativity in engineering teams.
- Explain corporate financial documents and develop financial projections for new innovations.

These learning outcomes will be achieved through a combination of lectures by faculty, invited guest lecturers, reading of key literature, individual and team projects (including international virtual-team projects), and practical involvement in an engineering capstone design/market development project.