

## 4<sup>th</sup> Global Colloquium on Engineering Education

### Learning Across Boundaries through Michigan Tech University's Enterprise Program

#### Abstract

Michigan Technological University's Enterprise Program ([www.enterprise.mtu.edu](http://www.enterprise.mtu.edu)) is an innovative approach to undergraduate education that offers its students an opportunity to apply the technical knowledge gained through the classroom to problems of significance to industry. Within the program, multi-disciplinary teams of students work together in a business-like environment to address real-world engineering and business problems. Typical challenges faced by our students have ranged from the development of a new financial management information system for a real estate management firm, to the development of a new hybrid-electric vehicle...and everything in between.

As Enterprise Program participants, students must learn to deal with all facets of operating a business. Engineering decisions such as design for manufacturability, material selection, cost and societal impact must be balanced with business decisions such as profit/loss, intellectual property management, leadership, and human resource development. This learning environment not only helps to facilitate the transition from undergraduate student to professional work force, but also provides opportunities for students (and faculty) to develop leadership and entrepreneurial skills. An added benefit of the program is that it gives students ownership of a portion of their education that connects strongly to their career goals, resulting in a more engaged student.

The Enterprise Program was previously introduced at the 2002 International Colloquium on Engineering Education held in Berlin. This poster/presentation will supplement that introduction by providing an up-to-date look at the successes and challenges associated with this innovative entrepreneurial curriculum. Growth areas currently being pursued, such as the introduction of international enterprise learning experiences, will also be addressed.