Product Development and Engineering Problem Solving

October 26 – 28, 2015
Golden, Colorado USA

Product Development and Engineering Problem Solving is an intensive 3-day course that helps companies successfully navigate two distinct, but related problems: Product Development and Engineering Problem Solving. While new product development drives a company’s bottom line, there are always technical challenges to be met supporting that activity, such as the design of a complex test stand for example. By switching the focus from the paying customer or end-user to the company, engineering group, or even an individual engineer, all the tools described in this course apply to the solution of many technical problems.

Course content addresses engineering activities starting from the identification of the customer’s pain and definition of an opportunity to the construction of functional and non-functional prototypes. It covers tools and methods enabling organizations to deliver higher quality designs, faster, and with less investment. While the course focuses on discrete engineered products (think coffee makers to jetliners), it takes the broadest possible view of term “product”. So, concepts taught in this course are applicable to any product class, including services, software, commodities and more.

Course Topics
- Problem definition
- Opportunity Identification
- Customer Needs
- Engineering Metrics
- Scenario Modeling
- Functional Modeling
- Product Architecture
- Concept Generation and Selection
- Engineering Analysis
- Eliciting Customer Needs
- Prototyping
- ... and more

Course Director
William (Yitz) Finch has a doctorate in Mechanical Engineering from the University of Michigan, with an emphasis on product design. After graduation, he was a research scientist at MIT’s Center for Innovation in Product Development, working to deploy research products to the CIPD’s partner companies. For the past five years, Dr.Finch has taught Product Design/Development and Systems Engineering courses at MIT, the Naval Postgraduate School, CU Boulder, and Colorado School of Mines.

Full information about this course and an online registration form can be found at: [http://csmspace.com/events/pd](http://csmspace.com/events/pd)

Office of Special Programs and Continuing Education
Colorado School of Mines
Golden, Colorado 80401 USA
303.279.5563  •  space@mines.edu