

Graduate Certificate in Quantitative Decision-Making for Engineering Managers

The Quantitative Decision-Making for Engineering Managers Certificate prepares students to work as:

- Product Manager leading product development teams who are responsible for development of products in an organization
- Operations Manager responsible for overseeing operational activities within an organization and managing quality improvement activities
- Production Manager overseeing production, scheduling, inventory, and materials
- Supply Chain Analyst responsible for logistics, inventory control, and demand forecasting
- Procurement Analyst or Manager overseeing procurement activities

Students master the following skill set essential to these industry roles:

- Product, service, and process development and analysis
- Strategic planning and management
- Technical and data driven decision making
- Risk analysis
- Decision models
- Technology assessment
- Engineering economics analysis
- Financial resource management

The Graduate Certificate in Quantitative Decision-Making for Engineering Managers will be awarded upon successful completion of the 9-credit curriculum below. The courses are not listed in sequential order. All course work should be completed within two years of starting the certificate program. Students should e-mail questions to EngHelp@psu.edu.

9-Credit Required Curriculum			
Course #	Course Title	Semester Completed	Grade
ENGMT 501	Engineering Management Science		
SYSEN 536	Decision and Risk Analysis in Engineering		
ENGMT 510	Economics and Financial Studies for Engineers		

Note: Students must maintain a minimum grade point average of 3.0 (B) throughout the program. Courses may be applied to master's programs if admitted as a degree-seeking student. If degree-seeking, you must formally apply for degree admission. Up to 15 credits earned may be transferred to a master's degree, subject to restrictions outlined in [GCAC-309 Transfer Credit](#). Completing this certificate does not guarantee admission to a degree program. To be awarded the graduate certificate, students must successfully complete 9 credits of course work. Students must complete each course with a grade of C or better, and an overall grade-point average of 3.0 in the certificate courses.

Questions & Advising - Students should contact EngHelp@psu.edu with any questions. After successfully completing the required course work, please submit a Graduate Certificate Completion Form found at <http://greatvalley.psu.edu/form/graduate-certificate-completion-form>.