Graduate Certificate in Life-cycle System Design

The Life-cycle System Design Graduate Certificate prepares students to work as
- System Architect who will analyze, architect, design, implement, and manage the technical development aspects of a system
- Lead System Engineer who will design, implement, and coordinate technical design aspects of a system
- System Requirements Engineer who will identify, document, and manage requirements
- System Engineer who will develop and document technical aspects of system in any life cycle phase (concept, design, implementation, operation, maintenance)
- System Integration Engineer who will develops and manages interoperability across systems

Students master the following skill set essential to this industry role:
- System Architecture
- Human-Centered Design
- Design Thinking
- Model-Based System Design
- Development Methodologies
- Requirements Engineering
- Configuration Management
- Integration and Deployment

The Graduate Certificate in Life-cycle System Design 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**
SYSEN 555	Invention and Creative Design		
SWENG 886	Requirements Engineering (formerly SWENG 586)		
SYSEN 880	Systems Architecture and Models		

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.