



The Graduate Certificate in Systems Engineering will be awarded upon successful completion of the 12-credit curriculum below. The courses are not listed in sequential order. All course work should be completed within three years of starting the certificate program.

Students should e-mail questions, requests for course substitutions and approvals to [enghelp@psu.edu](mailto:enghelp@psu.edu).

<b>9 Credit Core Curriculum</b>	
<b>Course #</b>	<b>Course Titles</b>
SYSEN 520	Systems Engineering
SYSEN 522	Systems Verification Validation & Testing
SWENG 586	Requirements Engineering
<b>3-Credit Elective Curriculum</b>	
<b>Choose one of the courses below</b>	
<b>Course #</b>	<b>Course Titles</b>
STAT 500	Applied Statistics
SYSEN 530	Systems Optimization
SYSEN 531	Probabilistic Modeling and Simulation
SYSEN 532	Simulation in Systems Engineering: Discrete-Time Systems
SYSEN 533	Deterministic Modeling and Simulation
SYSEN 534	Simulation in Systems Engineering: Continuous-Time Systems
SYSEN 536	Decision and Risk Analysis in Engineering
SYSEN 550/850	Creativity and Problem Solving I ( <i>SYSEN 850 previously SYSEN 550</i> )
SYSEN 555	Invention & Creative Design

### Advising Worksheet

<b>9 Credit Core Curriculum</b>			
<b>Course #</b>	<b>Course Titles</b>	<b>Semester</b>	<b>Grade</b>
SYSEN 520	Systems Engineering		
SYSEN 522	Systems Verification Validation & Testing		
SWENG 586	Requirements Engineering		
<b>3-Credit Elective Curriculum</b>			
<b>Course #</b>	<b>Course Titles</b>	<b>Semester</b>	<b>Grade</b>

Students must maintain a minimum grade point average of 3.0 (B) throughout the program. Courses may be applied to the Master of Engineering in Systems Engineering if admitted as a degree-seeking student. If degree-seeking, you must formally apply for degree admission; completing this certificate does not guarantee admission to the degree program.

After successfully completing the required course work, please complete the Graduate Certificate Completion Form: <http://greatvalley.psu.edu/form/graduate-certificate-completion-form>