## DOCTOR OF PHILOSOPHY IN THE FIELD OF SYSTEMS ENGINEERING -ONLINE

The PhD in Systems Engineering is designed for those seeking to generate foundational and generalizable knowledge that expands the field of systems engineering as an academic and professional discipline.

## REQUIREMENTS

The following requirements must be fulfilled:

The general requirements stated under School of Engineering, Doctoral Program Regulations (http://bulletin.gwu.edu/ engineering-applied-science/#seasregulationstext).

At least 54 credits, including a minimum of 24 credits in required and elective courses and 30 credits in dissertation research.

Code	Title	Credits
Core requirements		
Required courses		
EMSE 6765	Data Analysis for Engineers and Scientists	5
EMSE 8000	Research Formulation in Engineering Management and Systems Engineering	
One 3-credit research methodology course assigned by the faculty advisor.		
Five additional courses (15 credits) assigned by the faculty advisor.		
Research		
EMSE 8999	Dissertation Research (taken for a minimu	ım

## **Additional requirements**

1. To advance to the research phase, students must achieve a minimum GPA of 3.4 with no grade below *B*- at the completion of their coursework.

of 30 credits)

- 2. Students must be accepted to present their proposed research at an appropriate engineering professional society conference no later than the first semester of research.
- 3. Students must submit an article based on the results of the dissertation research to an approved, refereed scholarly journal. Credit must be given in the publication to the fact that the material is abstracted, summarized, or developed from a dissertation submitted to the George Washington University in partial fulfillment of the requirements for the Doctor of Philosophy degree. Before the candidate is permitted to defend the dissertation, this original article must be accepted for publication.

4. Students must successfully defend their dissertation before a committee of five faculty members within five year from the start of the program. Students have a maximum of two attempts to pass their dissertation defense. When the committee is convinced of the quality and originality of the candidate's contribution to knowledge as well as his or her mastery of the scholarship and research techniques of the field, the committee recommends the candidate for the degree of doctor of philosophy.