



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Nuclear Engineering Design

NUCLREN 6766

Credit Hours:

2.00 - 2.00

Course Levels:

Graduate

Course Components:

Lecture

Course Description:

A practical experience in the design process within the context of nuclear engineering. Students will be organized into groups. A design project will be specified. Each group will produce and present a final design report.

Prerequisites and Co-requisites:

Prereq: NuclEn MS Core, or permission of instructor.

Course Goals / Objectives:

- Understanding and carrying out the various steps in the design process
 - Applying concepts and analytical skills that were learned in the prior coursework to the solution of a specific design problem
 - Utilizing the various methods of industrial project engineering and management
 - Performing a literature search using the OSU Library facilities and internet resources
 - Working constructively as a member of a group and a project in a technology advanced workplace
 - Making sound engineering tradeoffs and decisions
 - Completing a final design report and contributing to a design presentation
-

Course Topics:

- PRELIMINARY DESIGN: Identification and definition of the problem; establishment of design criteria; literature search; conceptual design
 - INTERMEDIATE DESIGN - Synthesis: The general arrangement of the system components; Analysis: determination of system performance; evaluation: assessment of system performance relative to design criteria; repetition for optimization.
 - DESIGN FINALIZATION AND PROJECT REPORT
-

Designation:

Required