

# ENGR 525

## INTELLECTUAL PROPERTY AND INVENTION SYSTEMS

Spring of even years, Summer of odd years

### DESCRIPTION

Focused on the appropriate application of "patterns for patenting" together with intuition, inspiration, and cross-disciplinary connecting. De-mystify "inventing" as applied to science, engineering and technology. Credit not allowed for both 525 and 423.

### BENEFITS

Systems engineering is an interdisciplinary approach and means to enable successful systems. By focusing on what the customer needs, how it should function, defining the requirements, and then design synthesis, validation, and verification, real solutions to complex problems can impact every type of system.

### COURSE OBJECTIVES

Engineers and scientists are on the forefront of invention and generating valuable intellectual property for their employers. This course not only trains student to produce such inventive materials, but also explores how the different sciences and engineering disciplines connect. This course focuses on the appropriate application of "patterns of patenting" together with intuition, inspiration, and de-mystifying as applied to science, engineering, and technology.

Successful students will learn to:

- Evaluate the "patterns of patenting" and how to use them to enhance creativity
- Analyze linkages among different sciences and engineering disciplines
- Demonstrate ability to write a patent filing
- Understand the different types of intellectual properties created during product development

