NE Fuel Performance Blurb

In this course we will study the basic role of fuel in reactor operation and understand how the fuel impacts heat generation and transport to the coolant. The course will begin with an overview of different fuels and the manufacturing processes required to construct nuclear fuel. We will also study various fuel types and geometries, with a focus on light water reactor fuel and cladding. We will then study changes in the fuel and cladding material that degrade the performance of the fuel. Finally, students will apply knowledge gained to conduct fuel performance simulations.