

## **MSE in MAE with Nuclear Power Generation (NPG) graduate certificate**

Master of Science in Engineering (MSE) – Mechanical and Aerospace Engineering (MAE) with Nuclear Engineering focus

Must have MAE program committee chair, one member from EEE nuclear specialization and one member from MAE.

MSE – 30 credit hours:

15 hours in major research area

6 hours in mathematics

9 hours in other engineering/science/math (outside major research area)

MSE with NPG Certificate – 36 hours:

15 hours in major research area

6 hours in mathematics

15 hours in NPG

### **Sample Program of Study (POS) MSE with NPG Certificate**

#### *Major:*

MAE 504	Experimental Methods in Thermal and Fluid Processes
MAE 586	Convective Heat Transfer
MAE 589	Heat and Mass Transfer
MAE 587	Radiation Heat Transfer
MAE 598	Sustainable Energy

#### *Math:*

MAE 501	Linear Algebra in Engineering
MAE 502	Partial Differential Equations in Engineering

#### *NPG:*

EEE 460	Nuclear Power Engineering
EEE 562	Nuclear Reactor Theory and Design
EEE 563	Nuclear Reactor System Dynamics and Diagnostics
EEE 564	Interdisciplinary Nuclear Power Operations
MSE 565	Structural Materials in Nuclear Power Systems