Course Outcome Summary

Standard Course

NUET 100 Nuclear Industry Fundamentals

Course Information

<table>
<thead>
<tr>
<th>Division</th>
<th>ASET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Hours</td>
<td>45</td>
</tr>
<tr>
<td>Theory Hours</td>
<td>15</td>
</tr>
<tr>
<td>Lab Hours</td>
<td>30</td>
</tr>
<tr>
<td>Total Credits</td>
<td>2</td>
</tr>
</tbody>
</table>

Prerequisites

Appropriate Compass Score on Math and Reading

Course Description

This course presents fundamental principles used throughout the nuclear industry as an essential part of daily operations. Focus areas include Introduction to Nuclear Power Plants, Human Performance Enhancement Fundamentals, introduction to the Systematic Approach to Training (SAT), conduct of On the Job Training (OJT), Task Performance Evaluation (TPE), Foreign Material Exclusion (FME) and overview of a corporate safety manual, the concept of the Safety Conscience Work Environment, Conservative Decision Making, and Next Generation/Generation IV Reactors.

Course Outcomes

In order to evidence success in this course, students will be able to:

1. Describe and apply the culture of safety, continuous improvement, and peer checking.
2. Explain the requirement for documentation, formal procedures, and recordkeeping for nuclear related activities.
3. Describe the main systems in a nuclear power plant, and how they are used in power generation.
4. Identify typical power plant components and explain their function.
5. Describe different sources of radiation, their effects on organic matter, methods of detection, and shielding.
6. Identify and define problems in mathematic and scientific terms
7. Recognize assumptions and limits of analysis to the application of technology, including social and ethical implications.
8. Apply instruments to make measurements and analyze data from such measurements.
9. Recognize the need to engage in lifelong learning, and to perform research or conduct investigations to continuously upgrade knowledge and skills.
10. Communicate effectively, and work as part of a team.

Date Updated: 09 Dec 2014
By: MJ Dubois