

Improving Learner Experience and Knowledge Retention: Engineering Training

Summary

EPRI is modernizing courses to improve the learner experience and knowledge retention while reducing costs and travel burden to members. Currently, 107 instructor lead courses and 174 eLearning courses are available to meet member engineering training needs.

Example – Member Application

EPRI members have realized value through the use of EPRI training resources to support engineering roles in the nuclear industry.

Background

Nuclear power plants rely on a highly competent and technically diverse team of engineers to ensure safe and optimal operations. In addition to job specific training, there are highly technical topics that a subset of engineers at each site must understand to ensure proficiency. EPRI has produced training materials through its R&D programs to address this industry need. The training courses are offered via self-paced learning activities through the EPRI Learning Management System (LMS), in-person courses, and technical workshops to support a specific industry or site need.

Additionally, EPRI launched the Streamlined Training for Engineering Proficiency (STEP) project with a goal to build off existing EPRI and industry engineering training efforts and use a modern science of learning approach for Engineering Support Personnel (ESP) to become trained, qualified, and proficient at their specific job functions.

EPRI's Role

The primary focus of Engineering Training at EPRI is to provide technical training to members based on EPRI R&D outcomes and to meet member needs. To accomplish this, EPRI is assembling Engineering Training stakeholders to provide input on engineering training needs.

APPLICABILITY

All nuclear power utilities and engineering support companies

VALUE

EPRI delivers training for Engineering Support Personnel reduced member costs and staff burden to maintain and deliver equivalent training content. Materials are informed by R&D and EPRI experts while adhering to industry training expectations and criteria.

EPRI PROGRAM

Nuclear Training and Development

- 41: Nuclear Base Members: Engineering Instructor-Led Training Courses and eLearning Courses
- 41.20.03: Streamlined Training for Engineering Proficiency (STEP)

Additionally, EPRI has a project to develop an engineering training matrix. The engineering training matrix is a mapping of identified industry engineering training and qualification needs to EPRI training and non-training products that can be considered for engineering continuing training and professional development. The engineering training matrix will enable members to identify EPRI training products that can be utilized to meet site needs and to grant training equivalencies. It will be utilized by the Streamlined Training for Engineering Proficiency (STEP) project to identify engineering training gaps and prioritize training course development.

Value

Modernized Approach to Engineering Training: The training modernization project is primarily intended to improve the learner experience. Existing training courses are evaluated to identify methods to blend the content in eLearning modules, virtual and in-person instructor led activities, and office hour sessions. This blended approach generally reduces the costs of the overall course, reduces the travel costs for participants, reduces printing and shipping costs, allows for additional participation by members, and enables learners to better work around their site schedules.

Implemented Training Utilization: While EPRI members generally have similar training needs, the staffing and other aspects for each site can differ. EPRI is utilizing the reporting functionality of its learning management system to understand member usage of training products, allowing for data-informed decisions to improve training and the training offerings. Additionally, this information can help inform members of opportunities to utilize EPRI training relative to other members' activity.

Streamlined Training for Engineering Proficiency (STEP): This supplemental project is intended to bring value to members by reducing costs for engineering training, improving qualification times, applying innovative learning

technologies, and applying industry trends and operating experience via a sustainable and living training program. It is anticipated that this project will enable better industry alignment for engineering training, reduce site burdens for initial and continuing training, promote engineering proficiency, and improve worker performance and job satisfaction.

Resources

- [EPRI's Training Catalog](#)
 - This training catalog outlines all training products available through EPRI. This also contains the Scheduled Training for registration via the EPRI learning management system.
- [EPRI's Online Training Catalog](#)
 - This resource can be used to search for topics, research areas, modalities, and keywords. Hyperlinks direct the user to a course page where additional course information is available such as intended learners, purpose, objectives, and more. From these pages, users can directly access the EPRI learning management system to access the learning materials or register for a scheduled course session.
- [Engineering Training Program Page](#)
- [3002030472](#), *Streamlined Training for Engineering Proficiency (STEP)*

To support more effective technology transfer, EPRI is tracking implementation of key R&D activities.

Please access this link to provide input on your company's use of this particular research:

<https://www.surveymonkey.com/r/J5FRX9J>



Access additional Value Guides and examples of EPRI R&D application at:

<https://interactive.epri.com/nuclear-value/p/1>

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