



DEFENSE ACQUISITION UNIVERSITY
FE 301 - Advanced Facilities Engineering

090326

*Course Learning/Performance Objectives followed by its
enabling learning objectives on separate lines if specified.*

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| 1 | <p>Using a case scenario, Apply the concepts and principles related to Real Estate as they apply to the Facilities Engineering process.</p> <p>Assess how various agency and legislative considerations associated with installation environmental assessments and plans affect the facilities engineering and facility life cycle</p> <p>Devise a three-tiered approach to ensure proper gathering and dissemination of pertinent environmental information to be used in the decision-making process.</p> <p>Analyze appropriate environmental planning requirements, concepts and principles in the DoD facility life cycle.</p> <p>Explain how proper environmental management positively impacts installation sustainability, improved business practices and reduction in overall associated costs.</p> <p>Assess how the eight critical encroachment issues will affect the sustainment range management.</p> |
| 2 | <p>Using a case scenario, compare and contrast approaches to facilities engineering and the facility lifecycle across services, both in concept and practice</p> <p>Using a case scenario, judge the adequacy of and recommend improvements to the program documentation to include: acquisition baseline, risk management plan, budget estimates, acquisition plan, total ownership cost for the facilities engineering lifecycle, anti-terrorism force protection (ATFP), and commercial best practices to support the facilities lifecycle.</p> <p>Compose and explain the adaptation on non-DOD Government and industrial best practices for inclusion in DoD facilities engineering</p> <p>Devise a plan to recommend appropriate responses to external intervention in facilities lifecycle activities, including those by local stakeholders, congressional delegations, the public and others.</p> <p>Assess and defend your analysis of an acquisition plan that supports a facilities engineering mission requirement.</p> <p>Distinguish among common cost, schedule, and quality risks to select appropriate risk handling options and metrics.</p> <p>Evaluate total ownership cost (TOC) for the facilities engineering life cycle in an acquisition strategy.</p> <p>Formulate a funding and resource strategy to support a Facilities Engineering related mission requirement.</p> |
| 3 | <p>Given a case scenario, synthesize and assess the adequacy of controls utilized to manage variations from baseline plans for cost, schedule and quality in facilities lifecycle activities</p> <p>Analyze and prioritize the impacts on the baseline plans for cost, schedule and quality for a changed condition</p> <p>Assess the change-related construction clauses that apply during administration of changed conditions.</p> <p>Formulate other change elements that should be considered during contract administration of changed conditions.</p> <p>Select when to use a design-build or a design-bid-build construction contract.</p> <p>Decide if any Armed Service Board of Contract Appeals decisions can be used as guidance.</p> |
| 4 | <p>Given the ASCE Body of Knowledge for Civil Engineers and the viewpoints of an Installation Commander, synthesize and develop an action plan for ensuring the Facilities Engineering of the 21st Century is able to meet the demands that the job requires.</p> <p>Outline current initiatives and areas of interest for Facilities Engineering field.</p> <p>Compare and contrast the approaches that the class developed for meeting the requirements with that presented by a Senior Facilities Engineer from one of the Services.</p> |