RT-171: Mission Engineering Competencies
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Research Task / Overview

• Mission engineering as the application of systems of systems (SoS) engineering in an operational context.
• Research tasking and objectives to identify the critical skills required to successfully accomplish and shepherd mission engineering.
• Competency model builds on grounded theory leverages the Helix methodology on developing effective system engineers using a combination of mission engineer interviews as informed by searching the open source literature.
• Interviews and open source literature covers 1) mission engineering definition and organizational support, 2) identification of competencies and gaps, and 3) future vision.

Goals & Objectives

• Identify competencies for mission engineering that are truly unique.
• Identify critical overlaps between mission engineering and systems engineering competencies.
• Develop a mission engineering competency model that supports the DoD engineering community.
• Conduct a gap analysis comparing Defense Acquisition University's (DAU) current curricula against the competency requirements.
• Provide recommendations on creating a mission engineering curriculum.

Data & Analysis

Mission Engineering Competencies

<table>
<thead>
<tr>
<th>Technical Skills</th>
<th>Systems Mindset</th>
<th>Soft Skills</th>
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<tbody>
<tr>
<td>Percent of Excerpts</td>
<td>Percent of Interviewees</td>
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Methodology

Future Research

• Conduct a gap analysis comparing Defense Acquisition University’s (DAU) current curricula against the competency requirements.
• Provide recommendations on creating a mission engineering curriculum, as well as modifying the applicable acquisition career fields’ curricula to build interdisciplinary mission engineering knowledge and abilities.

Contacts/References

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