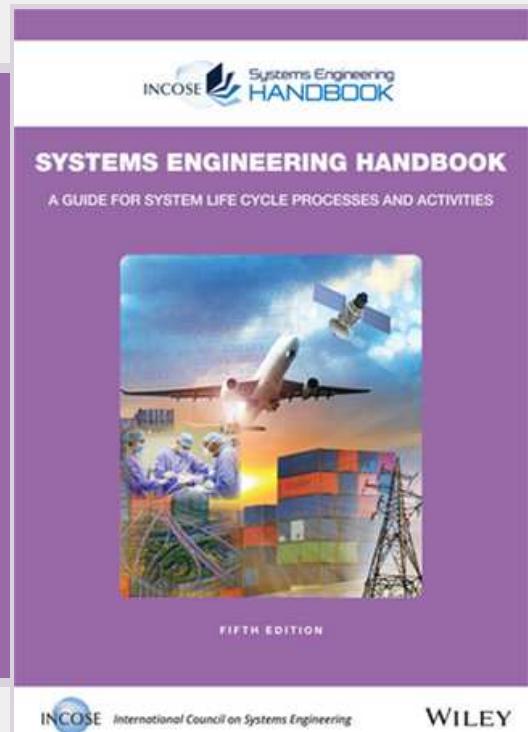


INCOSE SYSTEMS ENGINEERING HANDBOOK LEARNING OBJECTIVES

The INCOSE Systems Engineering Handbook Learning Objectives (LOs) became effective for the knowledge exam on **1 August 2023**.

As of **15 March 2025**, the knowledge exam transitioned to focus solely on SEH5E content. Academic Equivalency providers (universities) applying or renewing are evaluated based on this list of LOs.



For more information, visit incose.org/sehandbook

<h1>INCOSE Learning Objectives</h1>	<p>INCOSE Systems Engineering Handbook</p>
	<p>5th Edition</p>
<p>Systems Engineering and Life Cycle Overview</p> <ul style="list-style-type: none"> • Identify systems engineering definitions, principles, and concepts • Define awareness level concepts of systems thinking 	<p>Part 1</p>
<p>Lifecycle Models and Concepts</p> <ul style="list-style-type: none"> • Define awareness level concepts for lifecycles • Define awareness level concepts of acquisition and supply • Define awareness level concepts of business and enterprise integration <p><i>(Includes Infrastructure, Portfolio, Human Resources, Knowledge, Quality Management, and Quality Assurance)</i></p>	<p>Part 2</p>
<p>Technical Management Processes</p> <ul style="list-style-type: none"> • Define awareness level concepts of planning • Define awareness level concepts of monitoring and control • Define awareness level concepts of decision management • Define awareness level concepts of risk and opportunity management • Define awareness level concepts of configuration management • Define awareness level concepts of information management 	<p>Part 2</p>
<p>Technical Processes</p> <ul style="list-style-type: none"> • Define awareness level concepts of requirements definition • Define awareness level concepts of architecture definition • Define awareness level concepts of design for systems realization • Define awareness level concepts of modeling and analysis • Define awareness level concepts of integration • Define awareness level concepts for verification • Define awareness level concepts for transition • Define awareness level concepts for validation • Define awareness level concepts for operation and support 	<p>Part 2</p>
<p>Methods and Analysis</p> <ul style="list-style-type: none"> • Define awareness level concepts of design for quality characteristics • Define awareness level concepts for interfaces 	<p>Part 3</p>
<p>Application Considerations</p> <ul style="list-style-type: none"> • Define how systems engineering is applied <p><i>(Includes MBSE, Agile, Lean, PLE, System Types, Domains)</i></p>	<p>Part 4</p>
<p>Systems of Systems</p> <ul style="list-style-type: none"> • Define the complexities of a System of Systems 	<p>Part 4</p>
<p>Systems Engineering in Practice</p> <ul style="list-style-type: none"> • Identify aspects of systems engineering in practice 	<p>Part 5</p>