

## OMG-OCSMP-MU100 Exam Overview

<b>Exam Number</b>	OMG-OCSMP-MU100
<b>Exam Duration</b>	90 minutes in English-speaking countries (exception: city of Quebec) and 120 minutes in all others.
<b>Exam Fee</b>	US\$250 (or local equivalent) in English-speaking countries (exception: city of Quebec) and US\$260 (or local equivalent) in all others.
<b>Exam Type</b>	Multiple choice (text and SysML diagrams)
<b>Exam Pass Score</b>	>=56 of 90 questions answered correctly (>=62%)
<b>Exam Prerequisite(s)</b>	None
<b>Exam Specifications</b>	<a href="#">Systems Modeling Language (SysML) v1.6</a> : Use solely as a reference.
<b>Recommended Exam Study Guides</b>	<p><b><i>A Practical Guide to SysML: The Systems Modeling Language, 3<sup>rd</sup> Edition</i> (Friedenthal, Moore and Steiner)</b>: Chapters 3 (Getting Started with SysML) and 4 (An Automobile Example Using the SysML Basic Feature Set). All authors contributed to the SysML specification.</p> <p><b><i>Systems Engineering with SysML/UML: Modeling, Analysis, Design</i> (Weilkiens)</b>: The author contributed to the SysML specification.</p> <p><b><i>SysML Distilled: A Brief Guide to the Systems Modeling Language</i> (Delligatti)</b></p> <p><b><i>SysML for Systems Engineering</i> (Perry)</b>: The author contributed to the SysML specification.</p>
<b>Additional Reading</b>	<p><b><i>The OMG SysML Tutorial</i></b></p> <p><b><i>Simulation-Based Design Using SysML: Part 1: A Parametrics Primer</i> (Peak)</b>: Four authors contributed to generating this exam.</p> <p><b><i>Hybrid SUV Example (SysML v1.2)</i></b></p> <p><b><i>OMG SysML Website</i></b></p> <p><b><i>SysML Notations and Conventions</i></b></p> <p><b><i>Model-Based Systems Engineering (MBSE) with the Systems Modeling Language (SysML)</i> (Wolfrom)</b></p>
<b>Exam Training Options (not required)</b>	<p>Delligatti Associates, LLC (USA: <a href="#">5-day course</a>)</p> <p>Intercax with Georgia Institute of Technology (<a href="#">USA</a>)</p> <p>oose (Germany: 1-day course [<a href="#">English</a>] and 5-day course [<a href="#">German</a>])</p> <p>Mithun (Netherlands: <a href="#">4-day course</a>)</p>
<b>Exam Voucher Program</b>	Visit the <a href="#">Pearson VUE Voucher Store</a> for a 10% discount/10 vouchers or contact <a href="mailto:certificationinfo@omg.org">certificationinfo@omg.org</a> or call +1-781-444-0404 Ext. 144 for a 15% discount/25 vouchers, a 20% discount/50 vouchers and a 25% discount/100+ vouchers. Vouchers can be transferred. Vouchers expire one year after purchase. <a href="#">Contact Pearson VUE</a> to honor a previously purchased voucher price.
<b>Exam Registration</b>	<a href="#">Pearson VUE</a> : create an account, locate a test center, view available tests, (re)schedule a test (online or at a test center), cancel your exam (contact Pearson VUE >=24 hours prior to exam for a full refund or you forfeit the full exam price), view exam scores and <a href="#">Contact Pearson VUE</a> .
<b>Testing Accommodations</b>	If you have a hearing, learning, physical or visual disability you may contact us at <a href="mailto:certificationinfo@omg.org">certificationinfo@omg.org</a> to provide instructions on testing accommodations.
<b>Online Exam Check-In &amp; Requirements</b>	Visit <a href="#">Pearson VUE Online Proctoring</a> for detailed info. Log in at least 30 minutes early (online verification may take 15-20 minutes). Late arrivals will not be allowed to take the exam.
<b>Test Center Check-In &amp; Requirements</b>	Arrive at least 30 minutes early. Late arrivals will not be allowed to take the exam. Two forms of ID (at least one with photo and both with signature): alien registration card, bank card, credit card, employee badge, government issued, green card, military, passport, school and state ID. Do not bring any items (personal or otherwise) other than the two forms of ID to a test center. <a href="#">Pearson VUE Test Center Coronavirus Guidelines</a>
<b>Exam Languages</b>	Offered in English. You cannot use a translating app during the exam.

<b>Review Your Answers</b>	Before completing the exam you will be presented with a review screen to review your answers to all questions.
<b>Exam Score Reports</b>	Pass or fail, you will be provided with a score report on computer screen immediately following the exam whether on-site at test center or online. A hardcopy will be provided to you before leaving test center with your score in each major section. If you fail, you can review those sections where you scored poorly to assist you when you decide to retake the exam. You can also review your exam scores via your <a href="#">Pearson VUE account</a> .
<b>Certification Kit</b>	Those who pass the exam will receive a certification kit within 4-6 weeks of taking the exam. The kit will include a certification letter, certificate, digital certification logo download instructions, <a href="#">guidelines</a> and how to opt-into the <a href="#">OMG Certified Professionals Directory</a> . Certifications are associated with individuals and not companies.
<b>Lost Certificate</b>	Contact <a href="mailto:certificationinfo@omg.org">certificationinfo@omg.org</a> with your full name, mailing address and candidate ID number. Shipping costs will apply.
<b>Updating Contact Information</b>	You must first update your contact information via your <a href="#">Pearson VUE account</a> and then contact <a href="mailto:certificationinfo@omg.org">certificationinfo@omg.org</a> to update the <a href="#">OMG Certified Professionals Directory</a> .
<b>Certification Expiration</b>	Your certification expires 5 years from the date you passed the exam. The same or a higher-level certification must be taken prior to the expiration date to extend a certification by 5 years.
<b>Retaking the Exam</b>	You can retake the exam 30 days after you last took the exam. However, an exam cannot be retaken more than 3 times within a 12-month period. The cost of a retaken exam is US\$175 (or local equivalent) in English-speaking countries (exception: city of Quebec) and US\$185 (or local equivalent) in all others. <a href="#">Contact Pearson VUE</a> to request the exam retake discount.
<b>Still Have Questions?</b>	<a href="mailto:certificationinfo@omg.org">certificationinfo@omg.org</a>

### General Areas Tested in OMG-OCSMP-MU100 Exam

MODELS OF REQUIREMENTS	
<b>Interpreting Requirements on Requirement Diagrams</b> The concept of "requirement", key relationships including derive, verify, satisfy, refine, trace, containment as well as the Requirement Diagram description, purpose and benefits.	7%
<b>Interpreting System Functionality on Use Case Diagrams</b> Use Case Diagram description, purpose and benefits, use case structure encompassing use case, actor and subject, as well as basic relationships including association, include, extend and generalization.	7%
MODELS OF SYSTEM STRUCTURE	
<b>Interpreting Model Organization on Package Diagrams</b> Package Diagram description, purpose, and benefits, aspects of packages including ownership of elements and defining a namespace, relationships including containment and dependency, and concepts of view and viewpoint.	7%
<b>Interpreting System Structure on Block Diagrams</b> Block definition and description, including definition vs. usage, valuetype (with units), block features including value properties, parts, references and operations. Block Definition Diagram description, purpose, and benefits, compartments, relationships between blocks including specialization and associations (including composite but not shared aggregation), multiplicities. Internal Block Diagram description, purpose, and benefits, enclosing block, flow ports and standard ports, connectors and item flows as well as representation of parts.	22%
<b>Interpreting System Constraints on Block Definition Diagrams and Parametric Diagrams</b> Interpreting constraint blocks on Block Definition Diagrams, Parametric Diagram description, purpose and benefits, constraint properties, parameters and expressions, connecting constraint properties and value properties with binding connectors.	7%
MODELS OF SYSTEM BEHAVIOR	

<p><b>Interpreting Flow-Based Behavior on Activity Diagrams</b>  Activity Diagram description, purpose, and benefits, I/O flow including object flow, parameters, parameter nodes and pins, control flow including control nodes, activity partitions (swimlanes) and actions including decomposition of activities using call behavior action, send signal action, as well as accept event action.</p>	13%
<p><b>Interpreting Message-Based Behavior on Sequence Diagrams</b>  Sequence Diagram description, purpose and benefits, lifelines, asynchronous and synchronous messages, and interaction references (to elements outside the diagram).</p>	7%
<p><b>Interpreting Event-Based Behavior on State Machine Diagrams</b>  State Machine Diagram description, purpose, and benefits, states and regions including state, regions, initial state and final state, transitions including trigger by time and signal events, guard and action (i.e., effect), as well as behaviors including entry, exit and do.</p>	10%
<b>CROSS-CUTTING CONSTRUCTS</b>	
<p><b>Interpreting Allocations Across Multiple Diagram Types; Other Topics</b>  Allocation description, purpose and usage, AllocatedFrom and AllocatedTo, representation including callouts, compartments, allocate activity partitions, and tables, special notations for comment, rationale, problem and constraint. Some concepts relating to diagrams: diagram frames, ports, parameters and anchors on diagram frames, diagram header and diagram description as well as stereotype.</p>	20%
<b>Total</b>	<b>100%</b>