

## SysML Model Builder Fundamental Exam Overview

<b>Exam Series Code</b>	OMG-OCSMP-MBF200
<b>Exam Duration</b>	105 minutes in native English-speaking countries and 135 minutes in all others. <b>Note:</b> When scheduling your exam in a non-native English-speaking country, you will not see this extra time until you complete your exam order.
<b>Exam Fee</b>	US\$350 (or local equivalent)
<b>Exam Type</b>	Multiple choice (text and SysML diagrams)
<b>Exam Pass Score</b>	>=60 of 90 questions answered correctly (>=67%)
<b>Exam Prerequisite(s)</b>	Passing score on the OCSMP Model User Exam.
<b>Exam Specifications</b>	This exam is based on <a href="#">System Modeling Language (SysML) v1.2</a> . Use it solely as a reference. If interested, you can only view the differences between SysML v1.2 and <a href="#">v1.6</a> .
<b>Recommended Exam Study Guides</b>	<p><b><i>A Practical Guide to SysML: The Systems Modeling Language, 3<sup>rd</sup> Edition (Friedenthal, Moore and Steiner)</i></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 (Weilkiens)</i></b>: The author contributed to the SysML specification.</p> <p><b><i>SysML Distilled: A Brief Guide to the Systems Modeling Language (Delligatti)</i></b></p> <p><b><i>SysML for Systems Engineering (Perry)</i></b>: The author contributed to the SysML specification.</p>
<b>Additional Reading</b>	<p><a href="#">The OMG SysML Tutorial</a></p> <p><b><i>Simulation-Based Design Using SysML: Part 1: A Parametrics Primer (Peak)</i></b>: Four authors contributed to generating this exam.</p> <p><b><i>MBSE Practices in Telescope Modeling (Weilkiens)</i></b></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>Cookbook for MBSE with SysML</i></b>: Use solely as a reference.</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) (Wolfrom)</i></b></p>
<b>Exam Training Options (not required)</b>	<p><b><i>Delligatti Associates, LLC (USA: 5-day course)</i></b></p> <p><b><i>Intercax with Georgia Institute of Technology (USA)</i></b></p> <p><b><i>Mithun (Netherlands: 4-day course)</i></b></p> <p><b><i>NobleProg (Worldwide: Scroll to 'Other Countries' section to change region)</i></b></p>
<b>Exam Voucher Program</b>	View our <a href="#">Voucher Program</a> for potential discounts.
<b>Testing Accommodations</b>	For hearing, learning, physical and/or visual disability accommodations, please contact <a href="mailto:certification@omg.org">certification@omg.org</a> with proof of your most recent diagnosis thereof so we can officially request accommodation(s) on your behalf via Pearson, and once approved, provide you with further instructions on scheduling your exam(s) with your requested accommodation(s).
<b>Exam Registration</b>	<b><i>Pearson VUE</i></b> : 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> (for any technical issues-use chat feature to expedite a response).
<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. Bring 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.
<b>Technical Issues</b>	<a href="#">Contact Pearson VUE</a> (use chat feature to expedite a response).
<b>Exam Languages</b>	This exam is only offered in English. You cannot use a translation app during the exam.
<b>Review Your Answers</b>	Before completing your exam, you will be presented with a screen to review your answers to all questions.
<b>Exam Score Reports</b>	Whether at a test center or online, pass or fail, you will be provided with a score report on your computer screen immediately following your exam. A hardcopy of your score report will be provided before an individual leaves a test center with their score in each major section. You can also review your exam score reports via your <a href="#">Pearson VUE account</a> . If you fail your exam, you can review general sections where you scored poorly to assist when you decide to retake your exam.
<b>Digital Badges/Certificates</b>	Those who pass their exam will immediately receive an email from <a href="#">Credly</a> (admin@credly.com - check Junk folder) to claim their verifiable digital badge. Credly provides certified professionals with the option to share their certification credentials with others via the Credly Network, social media, <a href="#">print to .pdf or hardcopy certificate</a> , and other avenues.
<b>Certification Expiration</b>	If you failed your exam, contact <a href="mailto:certification@omg.org">certification@omg.org</a> to request a 30% discounted exam retake voucher.
<b>Retaking the Exam</b>	Your certification expires 5 years from the date you passed your exam. The same or a higher-level certification must be taken prior to the previous certification's expiration date to extend your certification.
<b>Still Have Questions?</b>	<a href="mailto:certification@omg.org">certification@omg.org</a>

### General Areas Tested in the SysML Model Builder Fundamental Exam

THE MODEL	
<b>Model Concepts</b> What is a model? Relationship between model and diagram.	10%
<b>Organizing a System Model Using the Basic Set of SysML Constructs</b> Building the model hierarchy. Building a package diagram using the basic set of SysML constructs	9%
MODELING REQUIREMENTS	
<b>Building a Requirements Model Using the Basic Set of SysML Constructs</b> How system requirements are captured in the model. Building a requirements diagram using the basic set of SysML constructs. Requirements relationships to other model elements. Representing requirements in tables and matrixes. Building a use case model using the basic set of SysML constructs.	16%
MODELING STRUCTURE AND BEHAVIOR	
<b>Building a Structural Model Using the Basic Set of SysML Constructs</b> How system structure is captured in the model. Building the block definition diagram. Building the internal block diagram.	22%
<b>Building a Parametric Model Using the Basic Set of SysML Constructs</b> How system analyses are captured using constraints in the model. Defining constraints on a block definition diagram. Building the parametric diagram using the basic set of SysML constructs.	10%
<b>Building a Behavioral Model Using the Basic Set of SysML Constructs</b> How system behavior is captured in the model.	24%

Building an activity diagram using the basic set of SysML constructs.	
Building a sequence diagram using the basic set of SysML constructs.	
Building a state machine diagram using the basic set of SysML constructs.	
<b>CAPABILITIES AND FEATURES</b>	
<b>Allocation Relationships</b> Allocation Relationships	4%
<b>Customizing a model</b> When to use a stereotype. Applying a stereotype (but not creation of profiles or stereotypes).	4%
<b>Total</b>	<b>100%</b>