

UML Language II

Course code: GOC265

The course is designed primarily for architects and programmers who need to understand or create logical and physical models of their solutions, both for the purpose of design and planning, and for documentation purposes. Students will gain advanced knowledge about Class, State Machine, Activity, Sequence, Component, Composite Structure and Deployment diagrams in the context of technical specifications and documentation software solutions.

Who the course is for:

- The course is intended for architects and developers

Required skills:

- The course assumes a basic knowledge of UML-level course GOC26

Teaching methods:

- Professional explanation with practical samples and examples.

Teaching materials:

- Powerpoint handouts and module printouts.

Course syllabus:

Advanced class diagrams

- The term "classifier" and its meaning in UML
- Generalization and redefinition detail
- Derived attributes subset union and attributes
- Multiple inheritance and its consequences
- Nested class
- Formal definitions of data types
- DataType, Primitive type, enumeration and their instances
- Differences between the two ways of describing data types

Advanced interaction

- Less used interaction fragments (strict, seq, critical, assert, neg ...)
- Communication diagram notation as an alternative sequence diagram
- Timing diagram
- Diagram overview of interactions

Description System Architecture

- Component diagram
- Deployment diagram
- Components
- Realization
- Manifestation
- Artifacts

Diagram composite structures

- Diagram of internal structures
- The class as a composite structure
- As a component of composite structure
- Collaboration and their use

Advanced state machines

- Choice junction and the difference between them
- Complex cases - entry and exit point
- Deep and shallow history

GOPAS Praha

Na Strži 2097/63
140 00 Praha 4 - Krč
Tel.: +420 226 201 390
info@gopas.cz

GOPAS Brno

Nové sady 996/25
602 00 Brno
Tel.: +420 530 513 590
info@gopas.cz

GOPAS Bratislava

Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 902 903 132
info@gopas.sk



Copyright © 2026 GOPAS, a.s.,
All rights reserved

- Parallel state machines
- Protocol state machine interface and souvyslosti

Profiles

- Diagram profile
- Stereotips and their structure
- Definition tags
- Definition alternate notation for stereotypovan? element
- Formal application profile model

GOPAS Praha
Na Strži 2097/63
140 00 Praha 4 - Krč
Tel.: +420 226 201 390
info@gopas.cz

GOPAS Brno
Nové sady 996/25
602 00 Brno
Tel.: +420 530 513 590
info@gopas.cz

GOPAS Bratislava
Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 902 903 132
info@gopas.sk



Copyright © 2026 GOPAS, a.s.,
All rights reserved