

Curriculum for

Certified Professional for  
Software Architecture (CPSA)<sup>®</sup>  
*Advanced Level*

**Module**  
**API**

**Application Programming Interfaces**

2025.1-RC0-EN-20241114



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## List of Learning Goals

- LG 1-1: The is the first learning goal, in category xy
- LG 2-1: TBD
- LG 2-2: TBD
- LG 3-1: TBD
- LG 3-2: TBD
- LG 4-1: TBD
- LG 4-2: TBD
- LG 5-1: TBD
- LG 5-2: TBD
- LG 98-1: Last learning goal of the curriculum

## Introduction: General information about the iSAQB Advanced Level

### What is taught in an Advanced Level module?

The module can be attended independently of a CPSA-F certification.

- The iSAQB Advanced Level offers modular training in three areas of competence with flexibly designable training paths. It takes individual inclinations and priorities into account.
- The certification is done as an assignment. The assessment and oral exam is conducted by experts appointed by the iSAQB.

### What can Advanced Level (CPSA-A) graduates do?

CPSA-A graduates can:

- Independently and methodically design medium to large IT systems
- In IT systems of medium to high criticality, assume technical and content-related responsibility
- Conceptualize, design, and document actions to achieve quality requirements and support development teams in the implementation of these actions
- Control and execute architecture-relevant communication in medium to large development teams

### Requirements for CPSA-A certification

- Successful training and certification as a Certified Professional for Software Architecture, Foundation Level® (CPSA-F)
- At least three years of full-time professional experience in the IT sector; collaboration on the design and development of at least two different IT systems
  - Exceptions are allowed on application (e.g., collaboration on open source projects)
- Training and further education within the scope of iSAQB Advanced Level training courses with a minimum of 70 credit points from at least three different areas of competence
- Successful completion of the CPSA-A certification exam



## Essentials

### What does the module “API” convey?

The module presents API to the participants ... At the end of the module, the participants know ... and are able to ...



Hier bitte das Modul bzw. dessen Lerninhalte zusammenfassend in 5-8 Sätzen beschreiben. Dabei **Application Programming Interfaces** nicht entfernen, beim Zusammenbauen wird dieser Platzhalter mit dem Modulnamen ersetzt.

### Curriculum Structure and Recommended Durations

Content	Recommended minimum duration (minutes)
1. Introduction	180
2. xz	150
3. Lots of theory	120
4. xy and example	180
5. abc und d	210
6. Final example	120
Total	960 (16h)



Bitte die oben angegebene Tabelle entsprechend anpassen.

= = =

Please adjust the table above according to your curriculum.



Bitte in dieser Datei nur die "?"-Platzhalter durch die Anzahl der Tage sowie die erreichbaren Punkte ersetzen. Ansonsten keine Änderungen vornehmen!

### Duration, Teaching Method and Further Details

The times stated below are recommendations. The duration of a training course on the API module should be at least **\*\*?\*\*** days, but may be longer. Providers may differ in terms of duration, teaching method, type and structure of the exercises, and the detailed course structure. In particular, the curriculum provides no specifications on the nature of the examples and exercises.

Licensed training courses for the API module contribute the following credit points towards admission to the final Advanced Level certification exam:

Methodical Competence: **\*\*?\*\*** Points

Technical Competence: **\*\*?\*\*** Points

Communicative Competence: **\*\*?\*\*** Points

### Prerequisites

Participants **should** have the following prerequisite knowledge:

- Prerequisite 1
- Prerequisite 2, etc.

Knowledge in the following areas may be **helpful** for understanding some concepts:

- Area 1:
  - Knowledge 1
  - Experience 2
  - Knowledge 3
  - Experience 4
  - Understanding 5



Kenntnisgruppen sowie Voraussetzungen bitte entsprechend ausformulieren!

## Structure of the Curriculum

The individual sections of the curriculum are described according to the following structure:

- **Terms/principles:** Essential core terms of this topic.
- **Teaching/practice time:** Defines the minimum amount of teaching and practice time that must be spent on this topic or its practice in an accredited training course.
- **Learning goals:** Describes the content to be conveyed including its core terms and principles.

This section therefore also outlines the skills to be acquired in corresponding training courses.

## Supplementary Information, Terms, Translations

To the extent necessary for understanding the curriculum, we have added definitions of technical terms to the [iSAQB glossary](#) and complemented them by references to (translated) literature.

# 1. This is the First Module's Title

Duration: XXX min

Practice time: XXX min

## 1.1. Terms and Principles

Term 1, Term 2, Term 3



Überschrift in 00-structure.adoc ersetzen



Sinnvolle Zeiten für Dauer und Übungszeit eintragen, vernünftige Begriffe aufzählen.

## 1.2. Learning Goals

LG 1-1: The is the first learning goal, in category xy

tbd.

## 1.3. References

[\[Bass et al. 2003\]](#), [\[Bachmann et al. 2000\]](#), [\[Kruchten 1995\]](#), [\[Starke 2011\]](#)


Eine Quelle wird über <<label>> referenziert. Dieses muss in 99-references/00-references.adoc definiert sein.

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A reference source is referenced via <<label>>. The label has to be defined in 99-references/00-references.adoc.



## 2. Here's the Title of the Second Lesson

Duration: XXX min

Practice time: XXX min

### 2.1. Terms and Principles

Term 1, Term 2, Term 3



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Sinnvolle Zeiten für Dauer und Übungszeit eintragen, vernünftige Begriffe aufzählen.

### 2.2. Learning Goals

#### LG 2-1: TBD

tbd.

#### LG 2-2: TBD

tbd.



Die einzelnen Lernziele müssen nicht als einfache Aufzählungen mit Unterpunkten aufgeführt werden, sondern können auch gerne in ganzen Sätzen formuliert werden, welche die einzelnen Punkte (sofern möglich) integrieren.

### 2.3. References

[Bass et al. 2003], [Clements et al. 2003]



Eine Quelle wird über `<<label>>` referenziert. Dieses muss in `99-references/00-references.adoc` definiert sein.

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A reference source is referenced via `<<label>>`. The label has to be defined in `99-references/00-references.adoc`.

### 3. The Third Module's Title

Duration: XXX min

Practice time: XXX min

#### 3.1. Terms and Principles

Term 1, Term 2, Term 3



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Sinnvolle Zeiten für Dauer und Übungszeit eintragen, vernünftige Begriffe aufzählen.

#### 3.2. Learning Goals

##### LG 3-1: TBD

tbd.

##### LG 3-2: TBD

tbd.



Die einzelnen Lernziele müssen nicht als einfache Aufzählungen mit Unterpunkten aufgeführt werden, sondern können auch gerne in ganzen Sätzen formuliert werden, welche die einzelnen Punkte (sofern möglich) integrieren.

#### 3.3. References

[Hargis 2004], [Starke 2011]



Eine Quelle wird über `<<label>>` referenziert. Dieses muss in `99-references/00-references.adoc` definiert sein.

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A reference source is referenced via `<<label>>`. The label has to be defined in `99-references/00-references.adoc`.

## 4. Fourth Module, This is its Title

Duration: XXX min

Practice time: XXX min

### 4.1. Terms and Principles

Term 1, Term 2, Term 3



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Sinnvolle Zeiten für Dauer und Übungszeit eintragen, vernünftige Begriffe aufzählen.

### 4.2. Learning Goals

#### LG 4-1: TBD

tbd.

#### LG 4-2: TBD

tbd.



Die einzelnen Lernziele müssen nicht als einfache Aufzählungen mit Unterpunkten aufgeführt werden, sondern können auch gerne in ganzen Sätzen formuliert werden, welche die einzelnen Punkte (sofern möglich) integrieren.

### 4.3. References

[Kruchten 1995]



Eine Quelle wird über <<label>> referenziert. Dieses muss in 99-references/00-references.adoc definiert sein.

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A reference source is referenced via <<label>>. The label has to be defined in 99-references/00-references.adoc.

## 5. And This is Module no 5

Duration: XXX min

Practice time: XXX min

### 5.1. Terms and Principles

Term 1, Term 2, Term 3



Überschrift in 00-structure.adoc ersetzen



Sinnvolle Zeiten für Dauer und Übungszeit eintragen, vernünftige Begriffe aufzählen.

### 5.2. Learning Goals

#### LG 5-1: TBD

tbd.

#### LG 5-2: TBD

tbd.



Die einzelnen Lernziele müssen nicht als einfache Aufzählungen mit Unterpunkten aufgeführt werden, sondern können auch gerne in ganzen Sätzen formuliert werden, welche die einzelnen Punkte (sofern möglich) integrieren.

### 5.3. References

[Starke 2011]



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A reference source is referenced via `<<label>>`. The label has to be defined in `99-references/00-references.adoc`.

## 6. Examples

Duration: XXX min	Practice time: XXX min
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This section is not examinable.

### 6.1. Terms and Principles

In every licensed training session, at least one example for API must be presented.

Type and structure of the examples presented may depend on the training and participants' interests. They are not prescribed by iSAQB.



Sinnvolle Zeiten für Dauer und Übungszeit eintragen.

### 6.2. Learning Goals

#### LG 98-1: Last learning goal of the curriculum



KURZE ERKLÄRUNG ZU DEN ZIELEN DIESER LERNEINHEIT

### 6.3. References

[Bachmann et al. 2000], [Kruchten 1995]



Eine Quelle wird über <<label>> referenziert. Dieses muss in 99-references/00-references.adoc definiert sein.

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A reference source is referenced via <<label>>. The label has to be defined in 99-references/00-references.adoc.

## References

This section contains references that are cited in the curriculum.

Aufbau eines Eintrags-Ankers:

- [[[label,Text der erscheint]]]

ACHTUNG: Die Labels dürfen nur Buchstaben beinhalten, keine Zahlen oder Sonderzeichen

= = =

Structure of an anchor:

- [[[label,text that will be shown]]]

ATTENTION: labels have to be non-numeric.



### B

- [\[Bachmann et al. 2000\]](#) Bachmann, F., L. Bass, et al.: Software Architecture Documentation in Practice. Software Engineering Institute, CMU/SEI-2000-SR-004.
- [\[Bass et al. 2003\]](#) Bass, L., Clements, P. und Kazman, R. (2003): Software Architecture in Practice. Addison-Wesley, Reading, Mass

### C

- [\[Clements et al. 2003\]](#) Clements, P., F. Bachmann, L. Bass, D. Garlan, J. Ivers et al.: Documenting Software Architectures – Views and Beyond. Addison Wesley, 2003.

### H

- [\[Hargis 2004\]](#) Hargis, Gretchen et al.: Quality Technical Information: A Handbook for Writers and Editors. Prentice Hall, IBM Press, 2004.

### K

- [\[Kruchten 1995\]](#) Kruchten, P.: Architectural Blueprints – The 4-1 View Model of Architecture. IEEE Software November 1995; 12(6), p. 42-50.

### S

- [\[Starke 2011\]](#) Starke, G. (2011): Effektive Software-Architekturen - Ein praktischer Leitfaden. 5. Auflage 2011, Carl Hanser Verlag, München.