

# Part of the form for Study Achievement Recognition Page 1

Achievements to be recognized:

**to be filled by Ulm University**  
(the applicant ~~may~~ **should** already fill in examination numbers and areas)

Application number:  When handing in more than one application form, please make sure to indicate the correct number on all subsequent pages that belong to this form. The number 01 will be set automatically on all forms.

The following achievements have been completed (module/exam)

	Grade/CP/workload	Recognition					Denial/Reasons		
		Yes/No	Exam number	in area (compulsory elective, specialisation, core subject, etc.)	Grade	CP	significant difference in acquired competences	incomplete documents	to be decided later
Uni Ulm, exchange student, Programming Concepts for Cognitive Sys. (Modul: 746 48)	Grade 1,0 CP 6 WL 4	yes ▼			▼		no ▼	no ▼	no ▼

**COURSE CERTIFICATE – EXCHANGE STUDENTS**  
(ERASMUS-Program, Bilateral and Baden-Württemberg Exchange Programs)

Student/in (Name) <i>Student (Name)</i>	Peter Example
Semester <i>Semester</i>	Summer Term 2019
Veranstaltungsnummer <i>Course Number</i>	74648
Titel der Veranstaltung <i>Course Title</i>	Programming Concepts for Cognitive Systems
Dozent/in (Name) <i>Instructor (Name)</i>	Prof. Dr. Max Meier
Veranstaltungsart <i>Type of Course</i>	Vorlesung und Übung (Lecture and Tutorial) ▼
Unterrichtssprache <i>Language of Instruction</i>	Englisch (English) ▼
Semesterwochenstunden <i>Contact Hours</i>	2 + 2 ▼
Art des Leistungsnachweises <i>Work Performed</i>	Klausur (Written Exam)
Leistungspunkte (ECTS Credits) <i>Workload (ECTS Credits)</i>	6
Note / Erfolg <i>Student's Performance</i>	1,0 (Local Grade)

Part of a certificate for exchange students of the University of Ulm

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	Grade	CP						significant difference in acquired competences	incomplete documents	to be decided later
Uni Ulm, exchange student, Programming Concepts for Cognitive Sys. (Modul: 746 48)	Grade	1,0	yes <input type="checkbox"/>	146 48	Methods, Gen. Concepts & Tools - Special Subject, Programming Concepts f. CogSys Modul: 746 48	1,0 <input type="checkbox"/>	8 <input type="checkbox"/>	no <input type="checkbox"/>	no <input type="checkbox"/>	no <input type="checkbox"/>
	CP	6								
	WL	4								

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Examination regulation

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**Module Descriptions**

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 [Courses of Studies: Cognitive Systems](#) > 
 [Examination regulations version: 2017](#) > 
 [Special Subject](#) > 
 [Methods, General Concepts and Tools - Special Subject](#) > 
 [74648 Programming Concepts for Cognitive Systems](#) >

Please choose:

[74648 Programming Concepts for Cognitive Systems](#)  [pdf 1](#)  
 [14648 Programming Concepts for Cognitive Systems](#)

## Modul details (cut-out)

Module: Programming Concepts for Cognitive Systems	
Code	8827974648
ECTS credits	6
Attendance time	4
Language of instruction	englisch
Duration	1 Semester

Cut-out of the Campus Management System for the suggested recognition (here for MSc Cognitive Systems)

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	Yes/No	Exam number	in area (compulsory elective, specialisation, core subject, etc.)	Grade	CP	significant difference in acquired competences	incomplete documents	to be decided later		
Uni Ulm, exchange student, Introduction to Computer Science I + II Modul: 710 70 + 710 77	Grade	3,0	yes <input type="checkbox"/>	102 50 108 50	Praktische Informatik, Einführung in die Informatik Modul: 703 19	3,0 <input type="checkbox"/>	8	no <input type="checkbox"/>	no <input type="checkbox"/>	no <input type="checkbox"/>
	CP	12								
	WL	8								

### Remark 1: Combination of Achievements

A recognition can be composed of several achievements (here: the two modules "Introduction to Computer Science I - Fundamentals" and "Introduction to Computer Science II – Advanced Concepts", each 6 ECTS) and can result in multiple recognized exams (here 102 50 – "Praktische Informatik" and 108 50 – "Einführung in die Informatik") within one module.

### Remark 2: Credit Points

The number of achieved credit points (in ECTS, here 12) must be higher than or equal to the number of recognized credit points (ECTS, here 8). Non-ECTS credits must be converted to ECTS. A proof of the work load associated with each achieved non-ECTS credit is to be provided by the applicant.

### Remark 3: Exam numbers and pre-requisites for exams

Some exams at the University of Ulm have pre-requisites. To recognize an exam with a pre-requisite, also the exam number of the pre-requisite exam is to be listed. Exam numbers can only be found via "Browse Modul Descriptions" in the Campus Management System and not via "Search in Modules".

[Oberste Ebene](#)
[Module für Abschluss: Bachelor of Science](#)
[Studiengang: Informatik](#)
[Studium gemäß Prüfungsordnung: 2017](#)
[Praktische Informatik](#)
[70319 Einführung in die Informatik](#)

Bitte wählen Sie aus:

- 70319 Einführung in die Informatik  pdf 1
- 10250 Einführung in die Informatik
- 10850 Praktische Informatik - Übung

Part of the form for Study Achievement Recognition Further Pages

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			Yes/No	Exam number	in area (compulsory elective, specialisation, core subject, etc.)	Grade	CP	significant difference in acquired competences	incomplete documents	to be decided later
Aalto University, BSc Computer Science Automated reasoning CS-E5610	GRD	4,0	yes ▼	none	Planning & Reasoning - Special Subj. Recognition without equivalent	1,7 ▼	6	no ▼	no ▼	no ▼
	CP	6								
	WL									
	GRD		▼			▼		▼		▼
	CP					▼		▼		▼
	WL									
	GRD		▼			▼		▼		▼
	CP					▼		▼		▼
	WL									

**Remark 1: Automated Reasoning, Recognition without equivalent**

Courses from *other* universities may be recognized in *elective areas* without an equivalent if no matching course exists at the University of Ulm and if the course could be offered within the elective area.

**Anmerkung 3: Grade conversion**

Grades from a different grading scale are converted according to the Bavarian Formula:  $N = 1 + 3 \cdot \frac{P_{max}-P}{P_{max}-P_{min}}$  with  $N$  representing the converted grade,  $P$  the grade as in the transcript,  $P_{min}$  and  $P_{max}$  the minimal and maximal possible grades. For the Aalto University the grades are from 0 (fail) – 5, hence we have here,  $1 + 3 \cdot \frac{5-4}{5-0} = 1,6$ . Please provide the documents relevant for the conversion.

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			Yes/No	Exam number	in area (compulsory elective, specialisation, core subject, etc.)	Grade	CP	significant difference in acquired competences		incomplete documents
TU Vienna, MSc Computational Logic Algorithms and Data Structures (186.13)	GRD	4,0	no ▼	103 13	Theoretical Methods in CS, Algorithms and Data Structures Modul: 703 18	4,0 ▼	8	yes ▼	no ▼	no ▼
	CP	6								
	WL	4								
Free University of Bolzano, BSc Computer Science, Object-orientierted Programming, Modul 63611	GRD	4,0	no ▼	102 50 108 50	Praktische Informatik, Einführung in die Informatik Modul: 703 19	4,0 ▼	8	yes ▼	no ▼	no ▼
	CP	10								
	WL	-								
	GRD		▼			▼		▼	▼	▼
	CP									
	WL									

**Remark 1: Algorithms and Data Structures**

Since the course "Algorithms and Data Structures" has 8 ECTS at the University of Ulm, but the course completed at TU Vienna has only 6 ECTS, the course cannot be recognized as equivalent.

**Remark 2: Object-orientierted Programming**

The module description of "Object-oriented Programming" shows the the taught competences are only partly overlapping the twwhat is taught in module 703 19 "Einführung in die Informatik" at the University of Ulm . Even though the number of achieved credits is larger (10 > 8), a recognition is nt possible since "Einführung in die Informatik" is a mandatory course and an exact match of the taught contents is required for mandatory courses.