

CAS LLMs and AI Agents (Bootcamp)

Stand: 30.10.2026 / Änderungen vorbehalten

MyCampus (https://mycampus.hslu.ch) bietet Ihnen die Möglichkeit, den Stundenplan direkt auf alle gängigen Geräte mit Internetzugriff herunterzuladen. Das Login erhalten Sie vor dem Kursstart.

Wochentag	Datum	Zeit	Lektionen	Bezeichnung	Module Description	Dozierende	Raum	SAS	Brückenangebot
Osterferien 26.03.2027 - 11.04.2027 / Schulferien 16.04.2027 - 01.05.2027									
Freitag	07.05.2027	09:15 - 10:00 Uhr	1	Introduction to the CAS in LLMs and AI Agents (Bootcamp)		Aygul Zagidullina, Dimitris Mousadakos		x	
Freitag	07.05.2027	10:05 - 12:35 Uhr	3	Module 1: Foundations of LLMs and AI System Design	Core concepts of NLP and large language models: tokenization, vector representation, transformer-based models, prompt engineering. Hands-on exercises	Ivan Sekulić	Thank you for the email and for sharing the schedule for the next cohort. I confirm that the dates look good to me.	x	
Freitag	07.05.2027	12:35 - 13:20 Uhr		Gemeinsames Mittagessen					
Freitag	07.05.2027	13:20 - 16:45 Uhr	4	Module 1: Foundations of LLMs and AI System Design	Core concepts of NLP and large language models: tokenization, vector representation, transformer-based models, prompt engineering. Hands-on exercises building a first structured LLM application.	Ivan Sekulić	Thank you for the email and for sharing the schedule for the next cohort. I confirm that the dates look good to me.	x	
Samstag		09:15 - 16:45 Uhr	8	Module 1: Designing Reliable LLM Applications	Structured model responses, clearly defined inputs, expected results and known boundaries. Participants scope their initial application — the starting point of the transfer project.	Ivan Sekulić	Thank you for the email and for sharing the schedule for the next cohort. I confirm that the dates look good to me.		x
Freitag	14.05.2027	09:15 - 16:45 Uhr	8	Module 2: Knowledge Systems and Retrieval-Augmented Generation (RAG)	Connecting LLM applications to documents, internal information and knowledge sources. Building retrieval-augmented generation pipelines for grounded, verifiable answers.	Max Buckley	Both those dates in May of 2027 work great!	x	
Samstag	15.05.2027	09:15 - 16:45 Uhr	8	Module 2: Trustworthy Knowledge Systems	Retrieval quality, handling of confidential data, access rights, and the updating and maintenance of knowledge sources in production.	Max Buckley	Both those dates in May of 2027 work great!		x
Freitag	21.05.2027	09:15 - 16:45 Uhr	8	Module 3: AI Agents and the Model Context Protocol	Chatbots vs. automated workflows vs. AI agents; building agents that structure tasks, operate tools and make decisions; the Model Context Protocol (MCP); agent orchestration and multi-agent workflows.	Alexander Stanenko	I confirm that the proposed date works well for me. I'm looking forward to the next cohort.	x	
Samstag	22.05.2027	09:15 - 16:45 Uhr	8	Module 3: Controlled, Governed Agent Systems	Building a controlled agent that interacts with a tool or external system. Focus on permissions, approvals, error handling and traceable decisions.	Alexander Stanenko	I confirm that the proposed date works well for me. I'm looking forward to the next cohort.		x
Freitag	28.05.2027	09:15 - 16:45 Uhr		Reservetag					
Samstag	29.05.2027	09:15 - 16:45 Uhr		Reservetag					
Freitag	04.06.2027	09:15 - 12:30 Uhr	4	Module 4: Bias, Fairness and Red Teaming	Bias recognition, fairness and transparency in LLM-based systems. Practical red teaming to probe models for weaknesses, undesired output and safety risks.	Stepan Gaponiuk	I already have vacation plans for almost the entire month of June (coming back only during the last week of the month)	x	
Freitag	04.06.2027	13:30 - 16:45 Uhr	4	Module 4: Bias, Fairness and Red Teaming	Bias recognition, fairness and transparency in LLM-based systems. Practical red teaming to probe models for weaknesses, undesired output and safety risks.	Samuel von Bausnern	I can do the 4th and 5th of June. I will check with Stepan if I can also cover his part. Best regards Sam	x	
Samstag	05.06.2027	09:15 - 16:45 Uhr	8	Module 4: Evaluation, Risk and Guardrails	Systematic evaluation of LLM applications: test cases, difficult inputs, quality criteria, measurement of response quality. Risks — hallucinations, jailbreaks, prompt injections, data loss, unwanted agent actions — and the guardrails, approvals and rules that address them.	Samuel von Bausnern			x
Freitag	11.06.2027	09:15 - 16:45 Uhr	8	Module 5: Customizing and Adapting Models	Assessing when off-the-shelf models suffice versus when local Small Language Models (SLMs) and custom fine-tuning make sense. Weighing effort, quality, data protection, and business ROI through practical techniques like Parameter-Efficient Fine-Tuning (PEFT), synthetic data generation, preference alignment, and rigorous model evaluation.	Luca Massaron	I confirm that 11th June works for me. Best, Luca	x	
Samstag	12.06.2027	09:15 - 16:45 Uhr	8	Module 5: Deployment: Cloud, On-Premises, Hybrid	Deployment forms for LLM-based solutions and their implications for cost, speed, data protection, reliability and integration into existing IT landscapes.	Luka Lapanashvili			x
Freitag	18.06.2027	09:15 - 16:45 Uhr	8	Module 6: Packaging and Releasing LLM Applications	Technical packaging, evaluation and release of LLM applications: automated evaluation, versioning, interfaces, logging and monitoring.	Luka Lapanashvili		x	
Samstag	19.06.2027	09:15 - 16:45 Uhr	8	Module 6: LLMOps: Operating in Production	Monitoring quality, cost and system behaviour after go-live; handling errors and failures; continuous improvement. Participants finalize the operational concept for their transfer project.	Dimitris Mousadakos	Yes, the date works for me, blocked my calendar		x
Freitag	25.06.2027	09:15 - 16:45 Uhr		Reservetag					
Samstag	26.06.2027	09:15 - 16:45 Uhr		Reservetag					
Sommerferien (03.07.2027 - 15.08.2027)									
Freitag	24.09.2027	09:15 - 16:45 Uhr	8	Präsentation/Schaufenster der finalen CAS-Transferarbeit		Aygul Zagidullina, Dimitris Mousadakos	Dimitris: Yes, the date works for me, blocked my calendar	x	

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56
- CAS
SAS
- Module**

M1: Foundations of LLMs and AI System Design

M2: Knowledge Systems and Retrieval-Augmented Generation (RAG)

M3: AI Agents and Controlled Workflows

M4: Quality, Safety and Responsible Use

M5: Customizing, Deploying and Scaling Models

M6: LLMOps and Operating Production-Grade AI Systems

- Eckdaten**
- xx.xx.2027 Eingabeschluss Themeneingaben via Complexis
- xx.xx.2027 Themenfreigabe durch Programmleitung, Zuweisung Betreuer und Gruppenbildung via Complexis
- xx.xx.2027 Abgabe CAS-Transferarbeit via Complexis
- xx.xx.2027 Abgabe CAS-Transferarbeit Präsentation via Complexis
- xx.xx.2027 Präsentation/Schaufenster Transferarbeit + Apéro
- xx.xx.2027 Bekanntgabe Diplomierungsergebnis via MyCampus
- xx.xx.2027 Ablauf Nachbesserungsfrist

- Unterrichtszeiten**
- 1 09:15 - 10:00
- 2 10:05 - 10:50
- 3 11:00 - 11:45
- 4 11:50 - 12:35
- 5 13:20 - 14:05
- 6 14:10 - 14:55
- 7 15:10 - 15:55
- 8 16:00 - 16:45