Leibniz AI Academy

How to obtain a Micro Degree in AI?

Prof. Marius Lindauer: Leibniz AI Academy - How to obtain an AI Micro Degree

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Do we still need to master AI in the age of LLMs?

1. AI is so much more than LLMs.

2. LLMs are not the solutions to every problem.

3. To master AI, you need to know

   ○ the foundations, and
   ○ how to apply them in practice.

4. The best paid position in the future will mostly be people knowing how to develop the next foundation models (incl. LLMs)
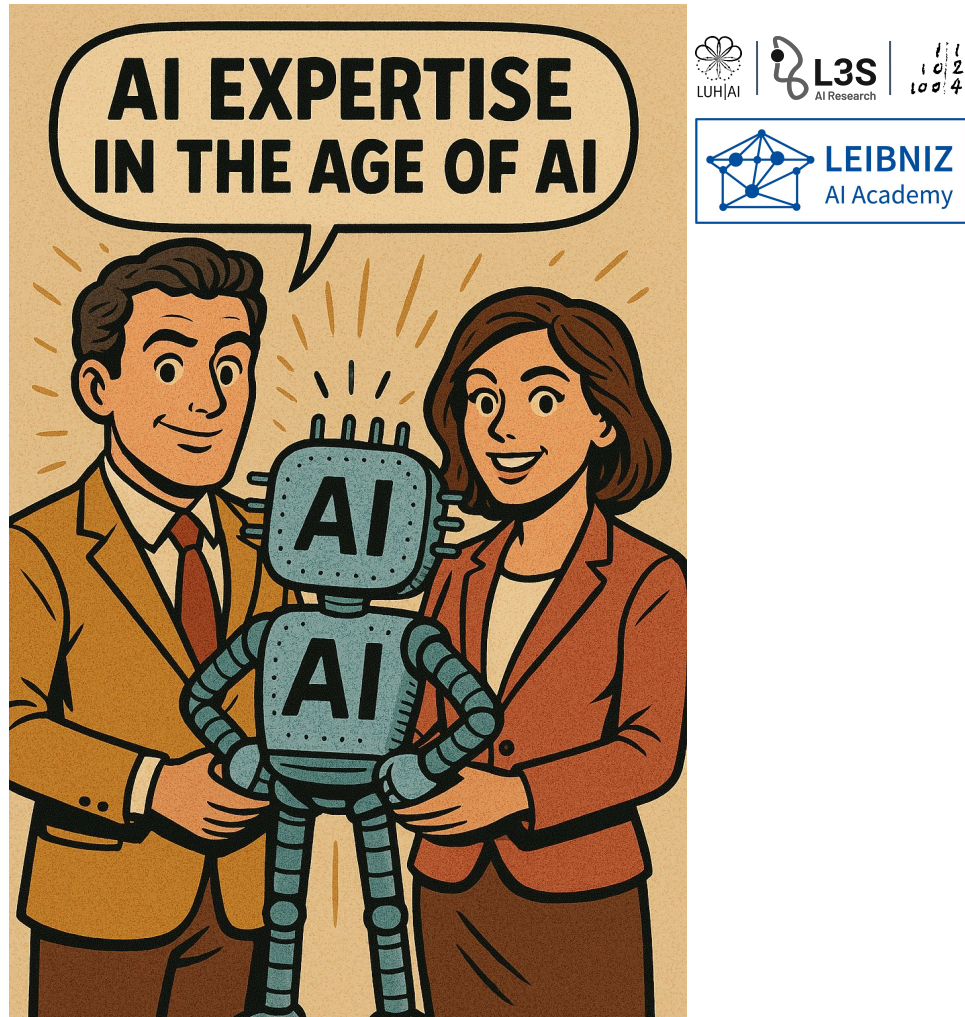
Why Leibniz AI Academy?

Learn from experts in the field

Foundational Knowledge in AI with practical applications of AI

Diverse expertise through external partners

Improve your job prospects with a certified specialization

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Which courses are offered?

Applications

| Data science for design and engineering (Geyer) | Spatial Data Science (Sester & Rottensteiner) | Image Analysis I (Sester & Rottensteiner) |

| AI for Production Engineering (Dekena) | KI in der Lehrkräftebildung (Schanze) | KI in der Erwachsenen- und Weiterbildung (Robak) | AI for Health (Rosenhahn) |

Specializations

| Visual Analytics (TBA) | Automated Machine Learning (Lindauer) |

| Semantic Technologies (Auer) | Computer Vision (Rosenhahn) | Deep Learning Foundations (Sikdar) | Reinforcement Learning (Lindauer) |

Foundations

| Artificial Intelligence (Nejdl) | Machine Learning (Rosenhahn) | Foundations of Data Science (Lindauer) | Foundations of Mathematical Stochastics (Weber) |

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Micro Credentials → Micro Degree

Micro Credentials
(aka. courses)

Master's Degree

Your normal study program

Micro Degree

CERTIFICATE

Education icons created by Freepik - Flaticon

Micro Degree Levels

Advanced
25 CP = 5 courses

Standard
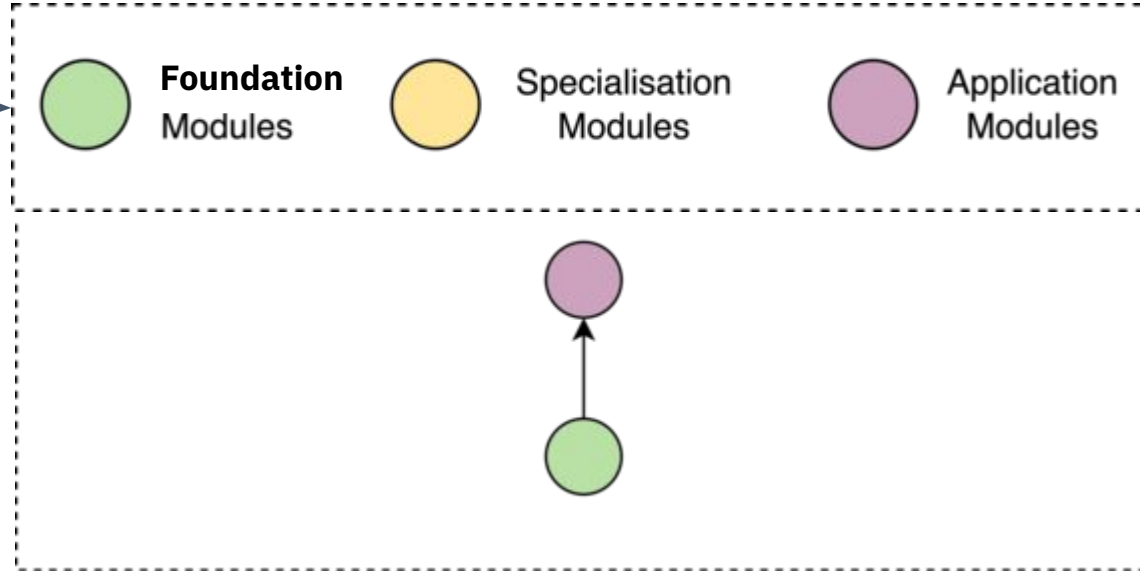20 CP = 4 courses

Basic
15 CP = 3 courses
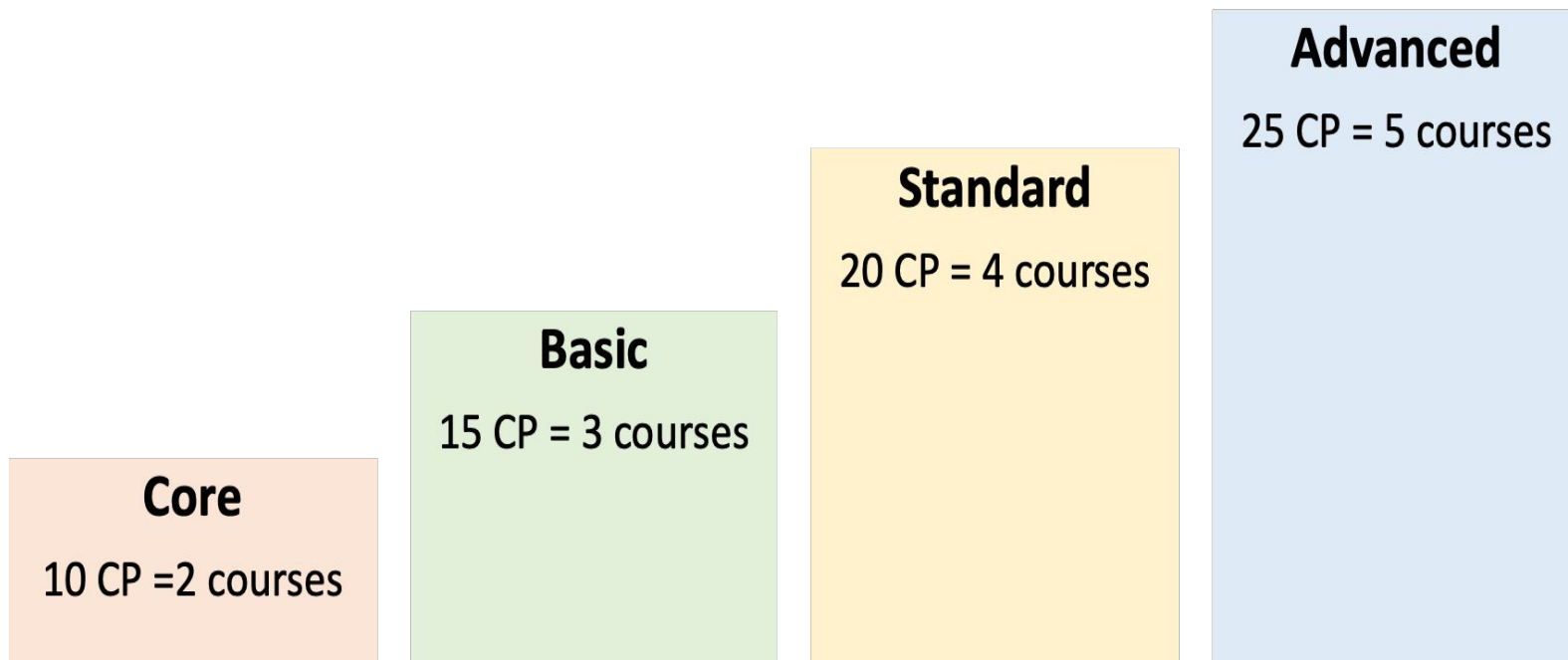
Core
10 CP = 2 courses

How to obtain a Core Micro Degree?

Core Degree
(10 ECTS)

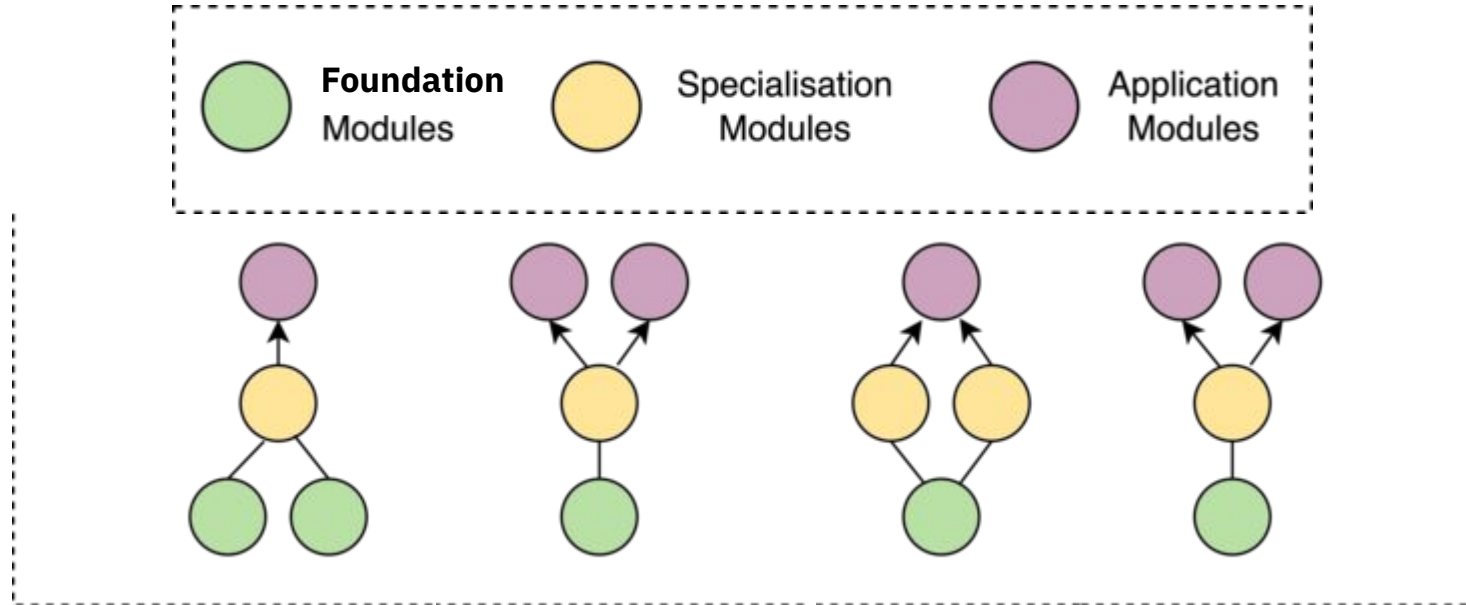Also known as micro credentials →

How to obtain a Basic Micro Degree?

**Basic Degree
(15 ECTS)**
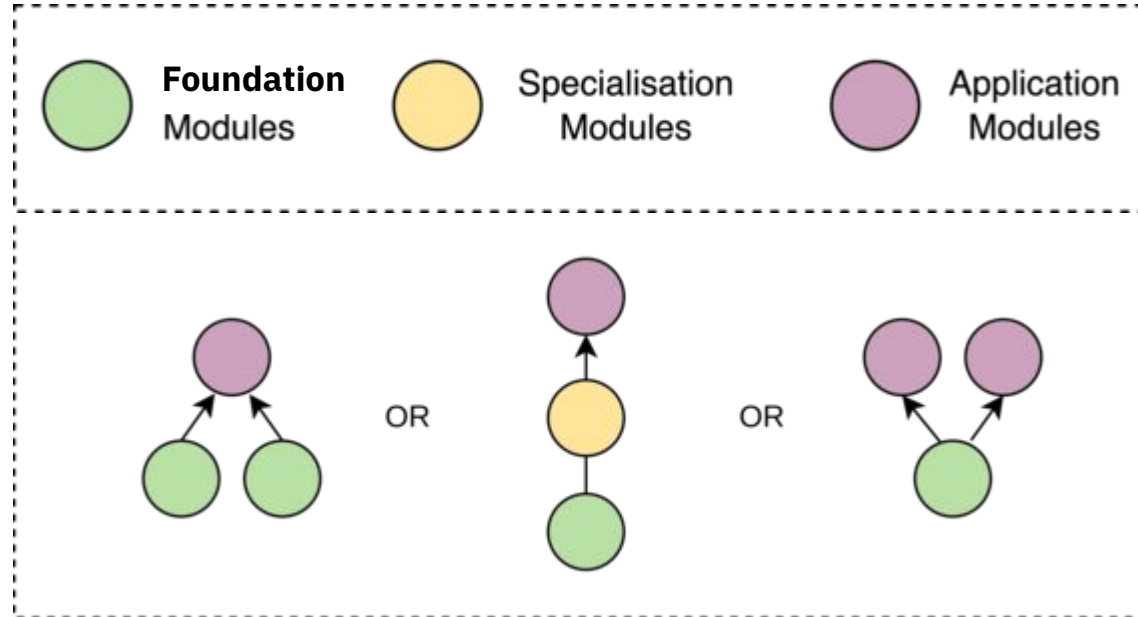
How to obtain a Standard Micro Degree?

**Standard Degree
(20 ECTS)**

Foundation Modules · Specialisation Modules · Application Modules

* We recommend for students with little CS background to focus on paths with more foundation and application modules.

How to obtain an Advanced Micro Degree?

**Advanced Degree
(25 ECTS)**

Foundation Modules

Specialisation Modules

Application Modules

OR   OR
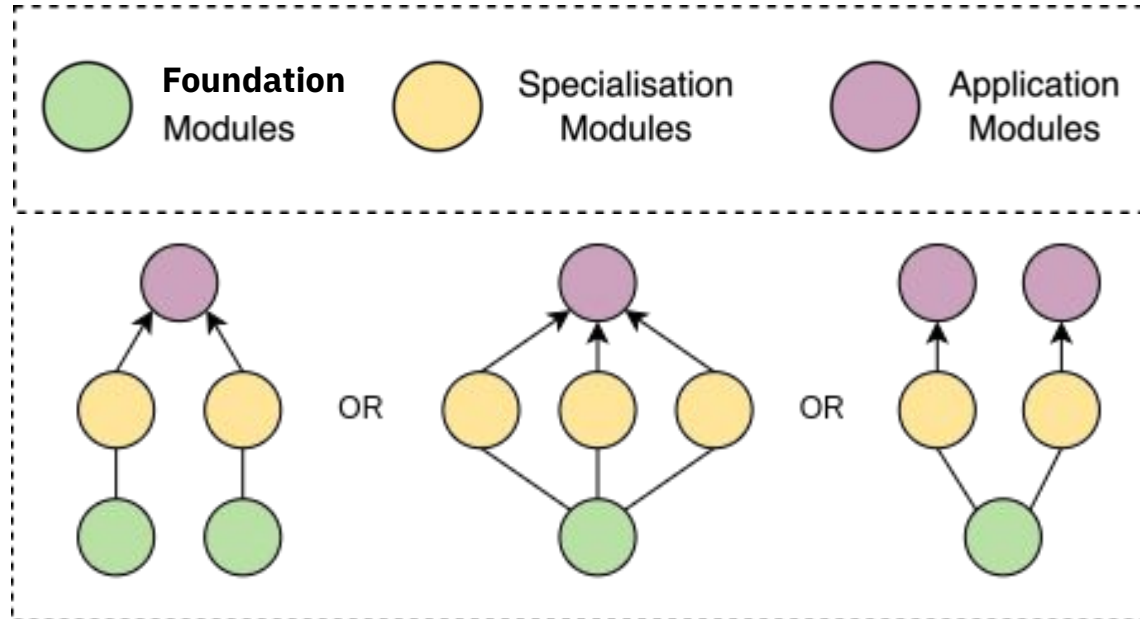
Micro Degree at the Leibniz AI Academy

AI and Production	AI and Health	AI and Design

AI and Geodectic Science	AI and Education

The name of the micro degree depends on the final application course, you successfully complete.

All Micro Degrees have Recommendations!

An Example for the "Design and AI" Degree

|	Core (10 CP = 2 courses)	Basic (15 CP = 3 courses)	Standard (20 CP = 4 courses)	Advanced (25 CP = 5 courses)
Applications — Data science for design and engineering	1	1	1	1
Specialisations — Computer Vision, Semantic Technologies, Visual Analytics, Deep Learning Foundations, Reinforcement Learning, Automated Machine Learning			1	2
Foundations — Artificial Intelligence 1, Machine Learning, Data Science Foundations, Stochastic Foundations	1	1	1	1

Minimum required number of courses per category:

Legend:
- Mandatory
- Recommended
- Elective
- ⚠ Not recommended for students with little CS or engineering background

# How to combine?

**Basic Degree
(15 ECTS)**

Workflow
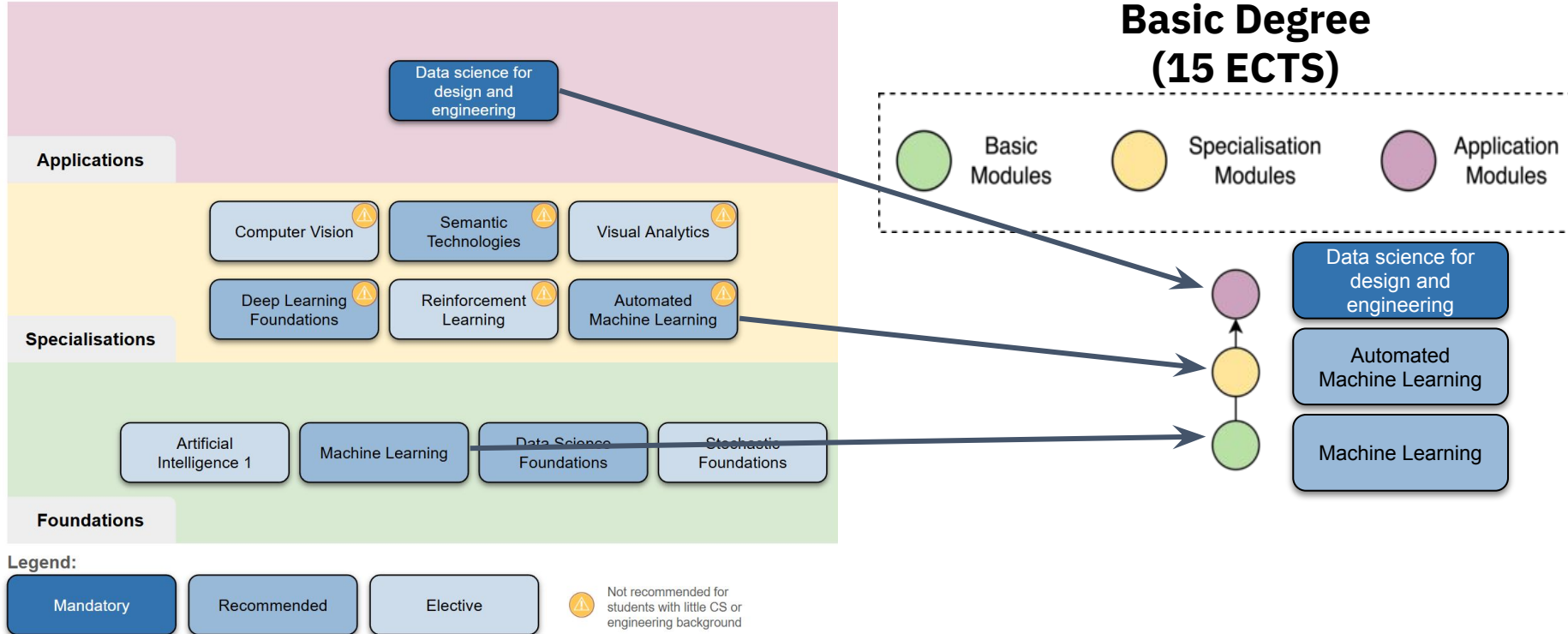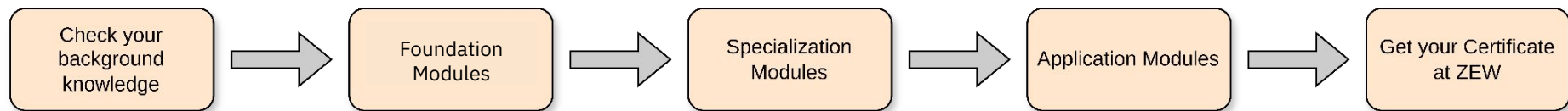
Important note:
- **All students at the LUH are eligible** for taking courses from the Leibniz AI Academy (regardless of their Master study program)
  - If a course is not offered by your faculty, talk with the professor in charge first and then write an **email to your examination office** s.t. **they register you for the exam** via QIS.
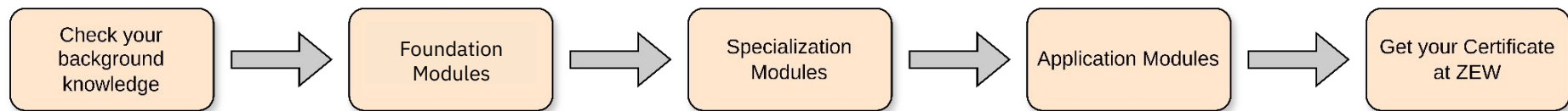 - Exam registration procedure might change in the future!

Workflow
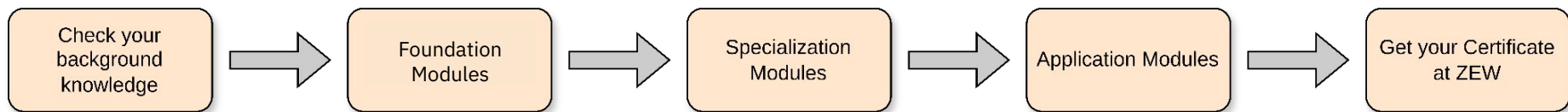
Important note:
- You can take the courses as part of **your study program** (e.g., "**Studium Generale**") or as **additional courses (i.e., not counting towards your Master degree**)
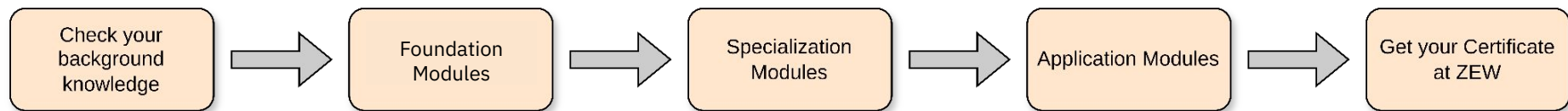
Workflow

Important note:
- If you already have a micro degree of a lower level (e.g. Core), you can **upgrade it** by taking more courses (e.g., to Standard)

Workflow

Important note:
- First certificates can be obtained by May'25 from the **ZEW** (Schloßwender Straße 7, EG links, Sekretariat)
  - Get a appointment via microcredentials-luh@zew.uni-hannover.de
  - You need your transcript ("Notenübersicht")
  - The certificate will require roughly 2 weeks

Join us on Discord to exchange ideas, projects and experiences with other students. Link see https://www.ai-academy.uni-hannover.de

Questions?

For detailed information,
  please also check out
https://www.ai-academy.uni-hannover.de
/en/frequently-asked-questions