

University Relations Zusammenarbeit mit Hochschulen

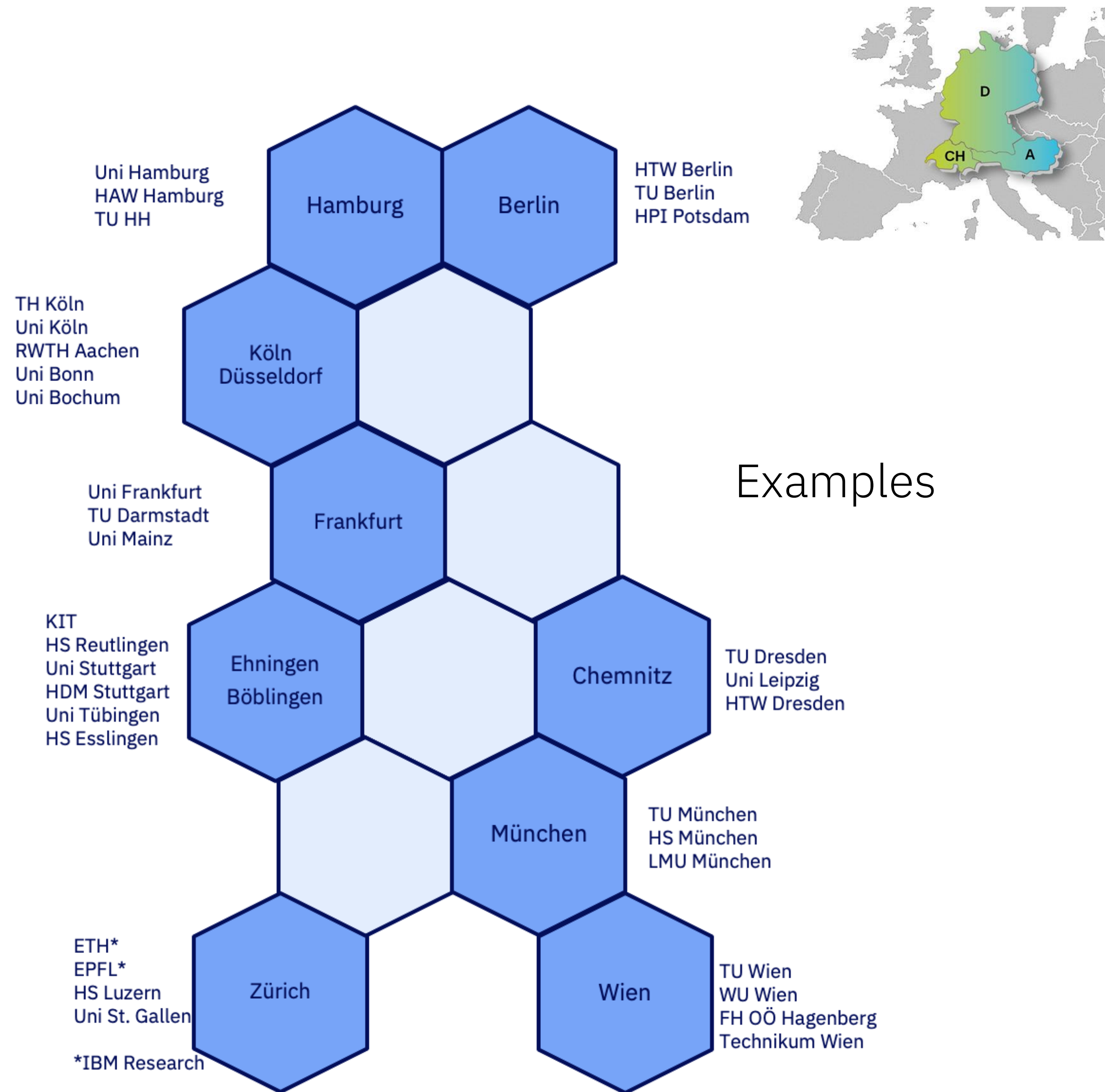
IBM CSR for Academia DACH

Dr. Martin Mähler

30 April, 2025

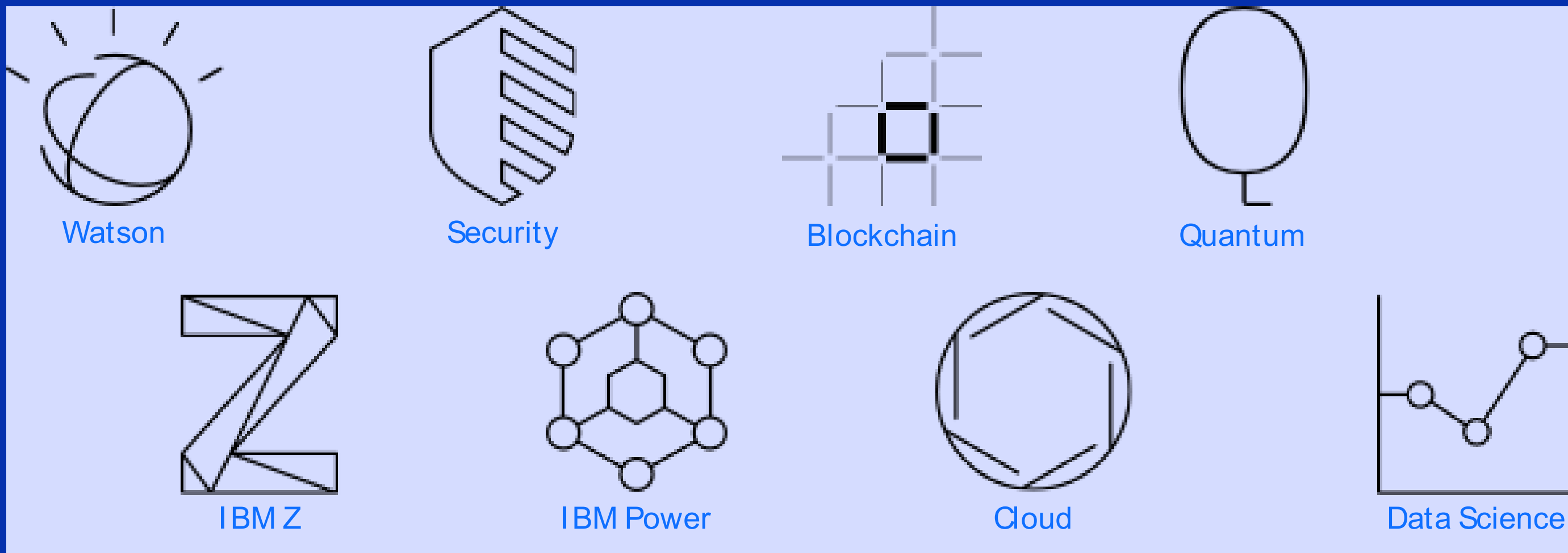


University Relations in DACH



- University Relations is part of **Corporate Social Responsibility (CSR)**
- Joint activities with universities are mainly driven by a large IBM volunteer community (**Ambassadors**) coming from all IBM business units
 - Technical focus on AI, Cloud, Systems, Security and Quantum
 - Activities range from spontaneous talks to regular events (e.g. lectures) and even a joint institute (at KIT)
- Activities are focused on **IBM Metro Locations**
 - Leverage neighbourhood distance
 - Top technical universities are located here
 - Leverage the regional eco-systems
- IBM provides free of charge access to professional technology solutions (free software, cloud and courseware) through the **IBM SkillsBuild for Academia** (ibm.com/academic)

IBM SkillsBuild for Academia



Get started by register with
your university email
address at
ibm.com/academic

Cloud Access

Free access to the IBM Cloud and selected resources and applications, such as Data Bases or Watson APIs

Software

Free access to the same software used by our commercial customers leading to practical training for today's jobs

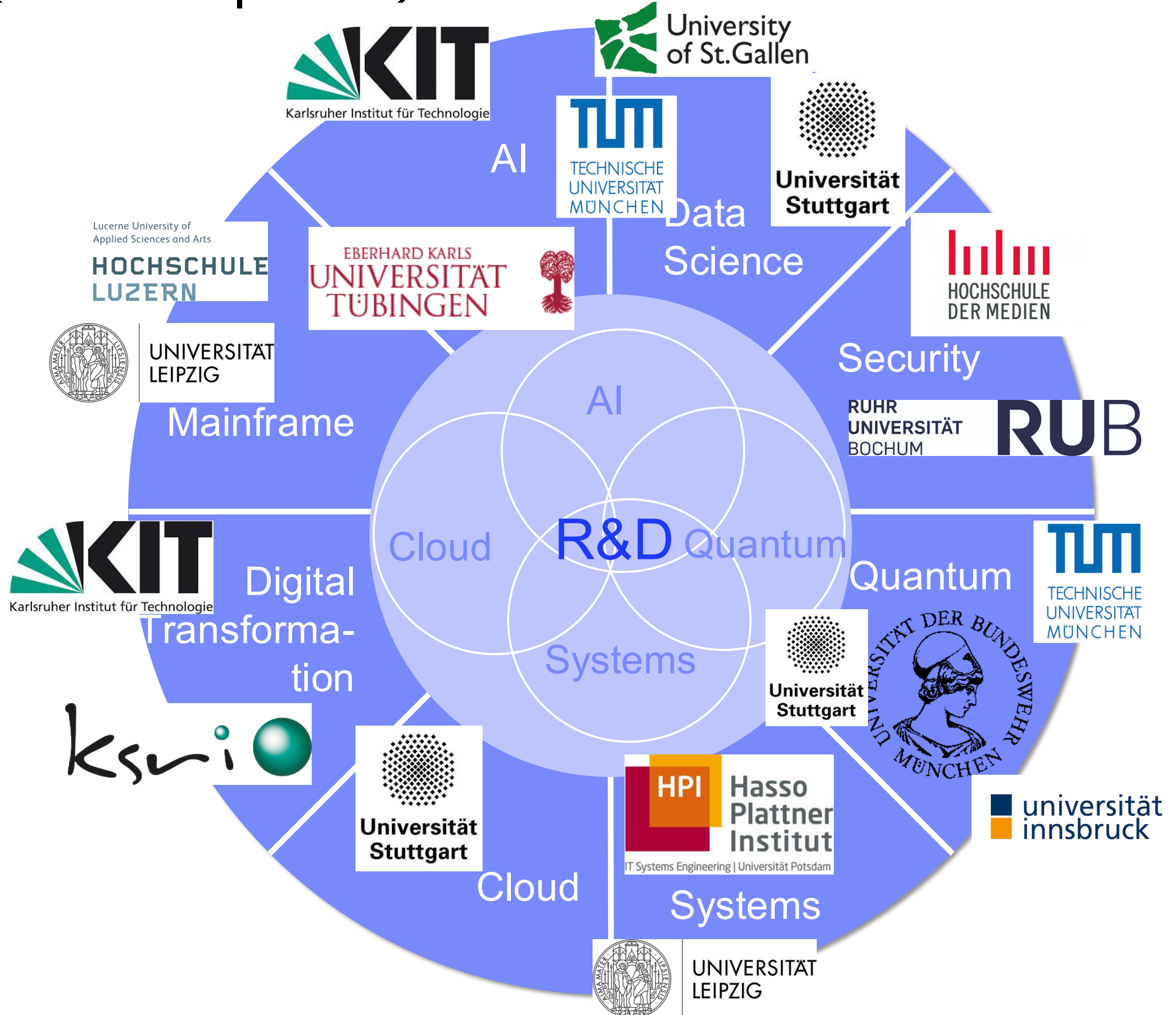
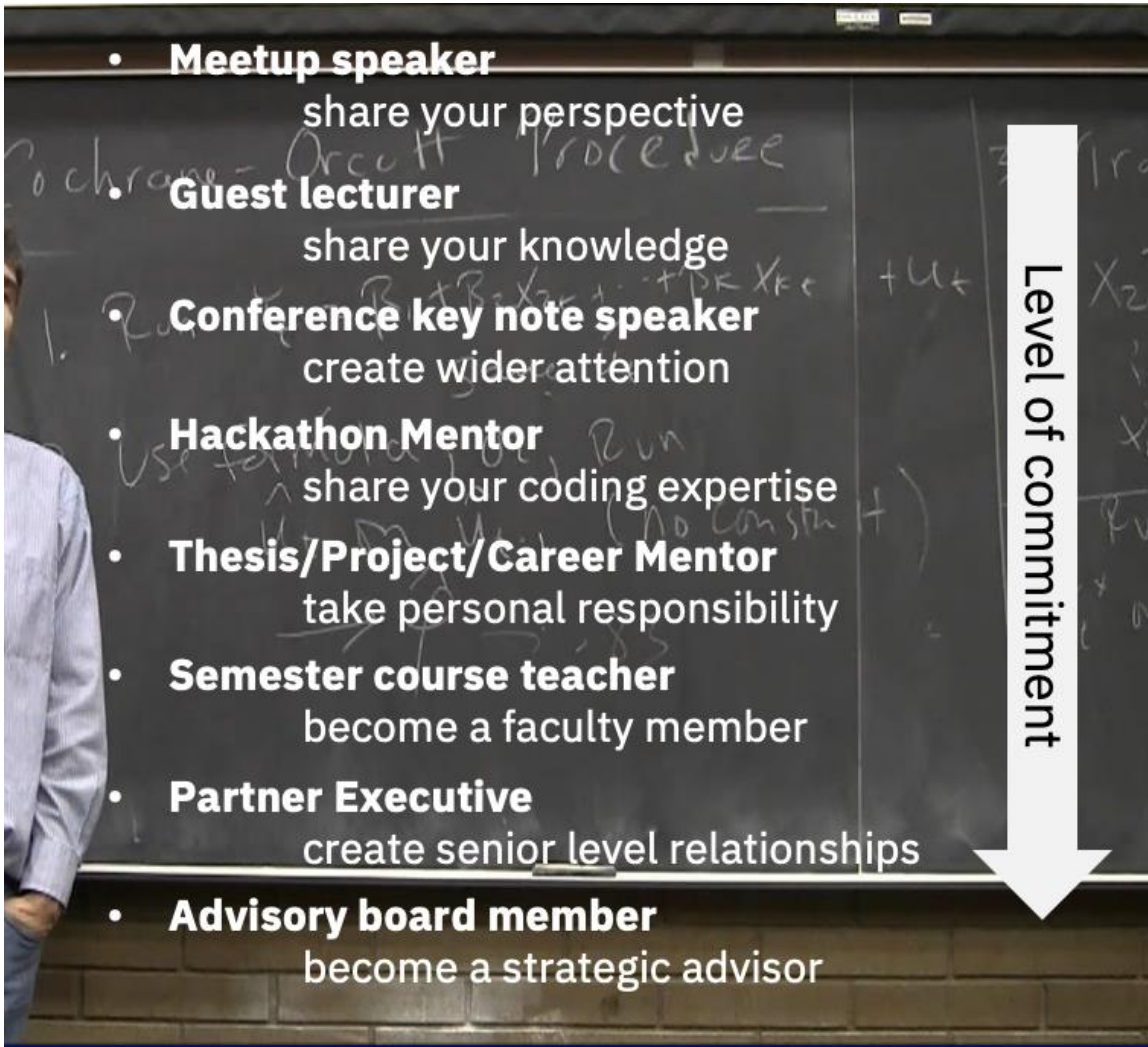
Courseware

Free access to enterprise quality courses



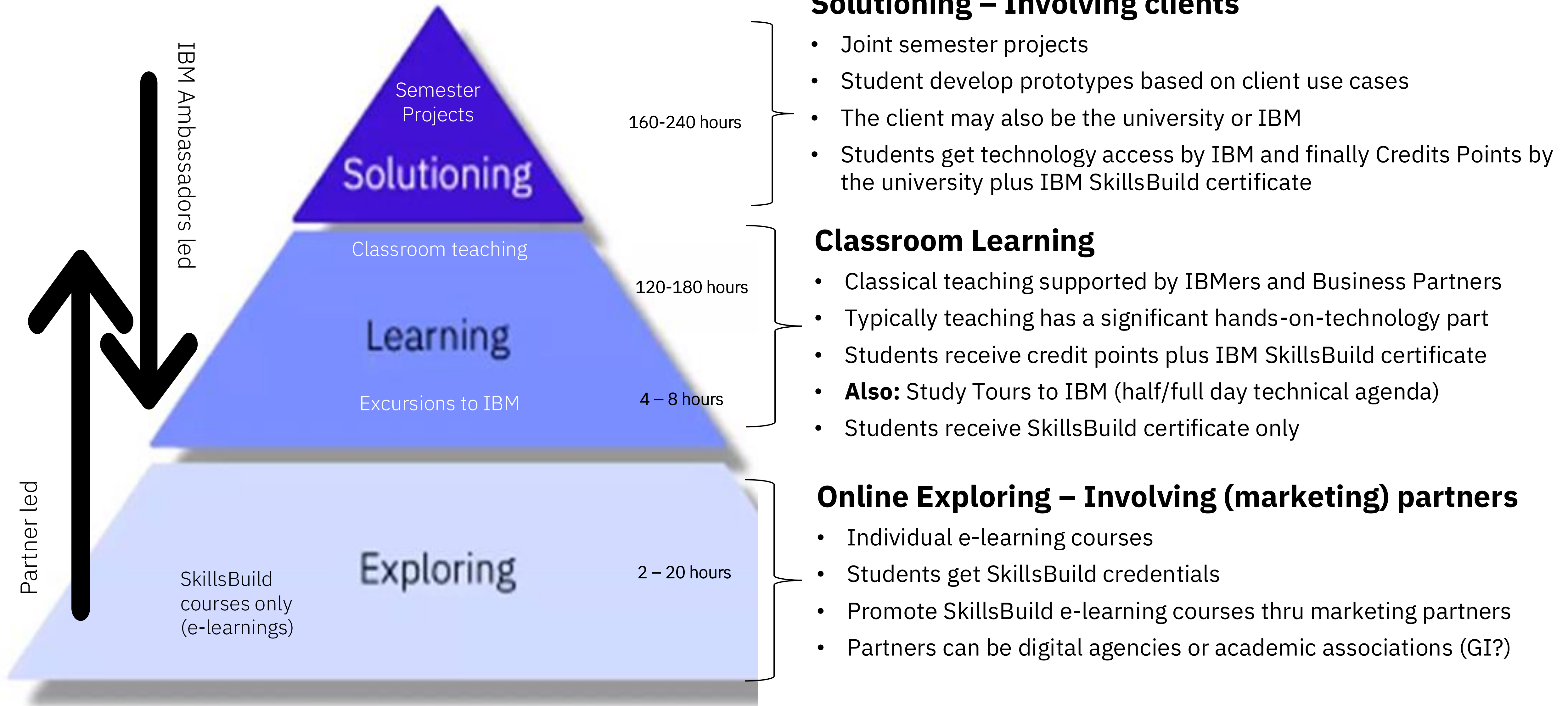
Partnerships and Activities (Examples)

Network of 180 volunteer IBMers



- Since 2008: Joint institute (KSRI) with KIT extending CSR activities
- Cooperation in research, teaching and collaborative innovation
 - New tenure track professorship announced in 2025
 - Strategic collaboration for generative AI and digital innovations

University activities can be grouped into three tiers



Semester
Projects

Solutioning

watsonx




School of Management and Law

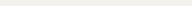
Lucerne University of Applied Sciences and Arts
HOCHSCHULE LUZERN


Fachhochschule Nordwestschweiz


University of Zurich
 UZH



Zürcher Kantonalbank



HUBER+SUHRNER
Excellence in Connectivity Solutions


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Learning Examples – Excursions and Workshops

- ➔ Half/full day events at IBM locations, e.g. Boeblingen, Hamburg, Munich, Zurich
- ➔ **Quantum Student Days** in Ehningen
- ➔ Technical Meetup Events for students
- ➔ 3 day “**Enterprise Class Computing**” mainframe workshops on campus

Classroom teaching

Learning

Excursions to IBM

More than 50 students attended IBM's 3 day “Enterprise Class Computing” lecture and workshop on mainframes at Coburg University this year in March.



From January 7th to 9th we held the AMC Young Talents Mainframe Convention in the IBM Lab in Böblingen.



On January 15th, we've welcomed students of University Kempten at the Quantum Data Center in Ehningen. The trip was initiated by our former IBM colleague Wolfgang Maier who runs a M.Sc. course about Quantum Computing at Kempten.

IBM Student Network Event

Join us for a Student Afterwork at the IBM Watson Center!

Connect with IBM students, enjoy a tour of our Innovation Studio, see our latest tech advancements and get a certificate of participation.

Free food, drinks, and the best view over Munich await!

Where:
IBM Watson Center Munich
Mies-van-der-Rohe Straße 6
80807 München

When:
10th of April 2025
Start at 5:30 PM

How:
Sign up or get in touch with us
sofie.pischl@ibm.com
berk.oezyasakci@ibm.com

IBM



EXKURSION ZUM IBM FORSCHUNGS- & ENTWICKLUNGSZENTRUM IN BÖBLINGEN

Coming soon: Learning GenAI - together with TUM and SAP

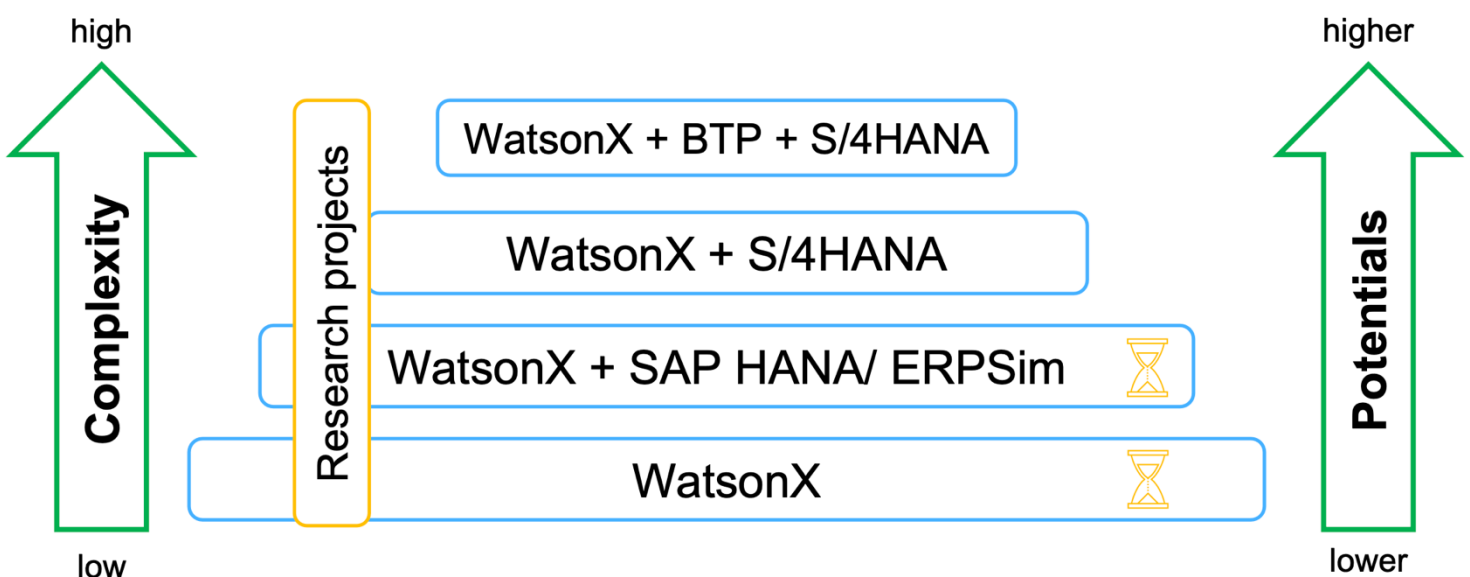


- ➔ As part of their alliance IBM and SAP have a strategic collaboration with **Technical University of Munich** (TUM) for 10+ years, IBM is providing a **Power10 server cluster** to TUM UCC
- ➔ The TUM University Competence Center (UCC) currently hosts a curriculum that has become a standard in SAP university education, i.e. used in **21 countries** by **2700 professors** at **450+ universities** to educate **80.000 students** p.a.
- ➔ TUM/IBM team works to include watsonx modules into the curriculum (ca. 6 ECTS, **100hours hands-on** per student per semester)
- ➔ TUM internal course finished in February, international pilot course with **10 faculties** and **300 students** to start in the summer term



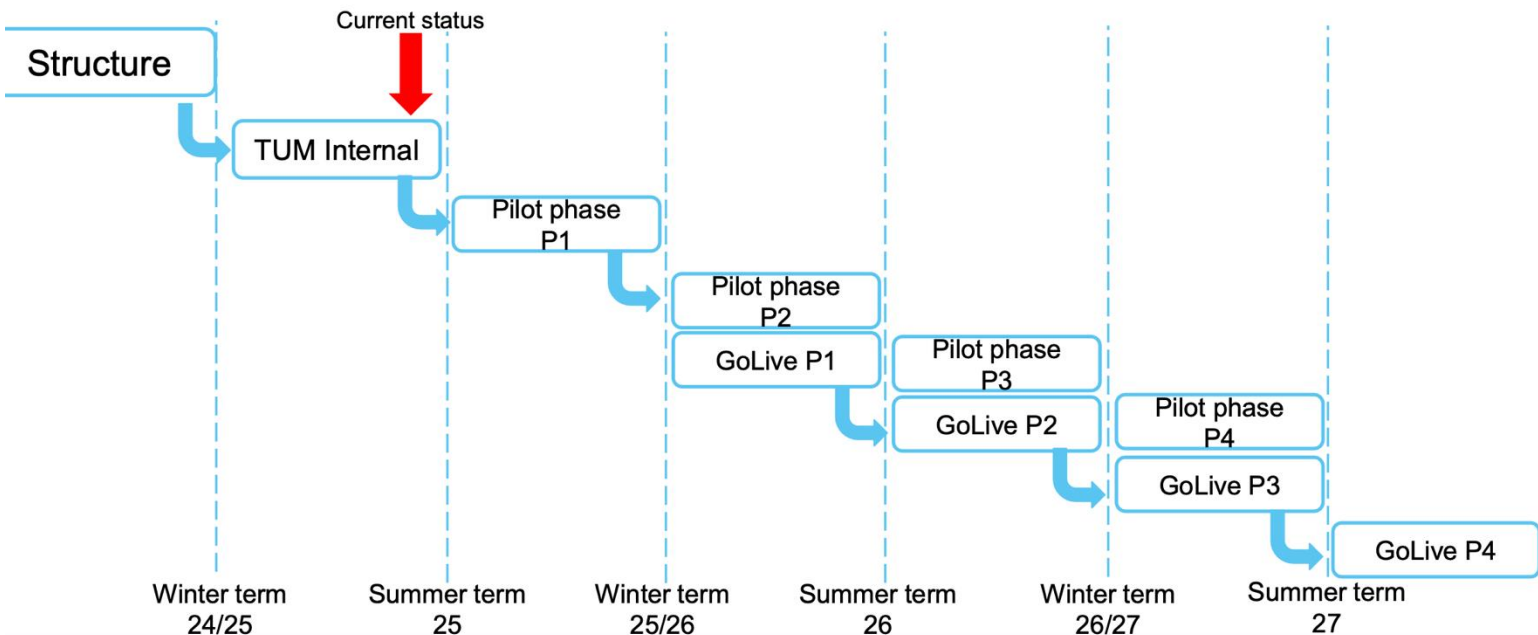
Curriculum contents

4-stage curriculum based on the WatsonX platform



Schedule overview

4-stage curriculum based on the WatsonX platform



Featured Exploring Offerings: ibm.biz/course-catalog.

Artificial intelligence

Cybersecurity

Data science

Cloud

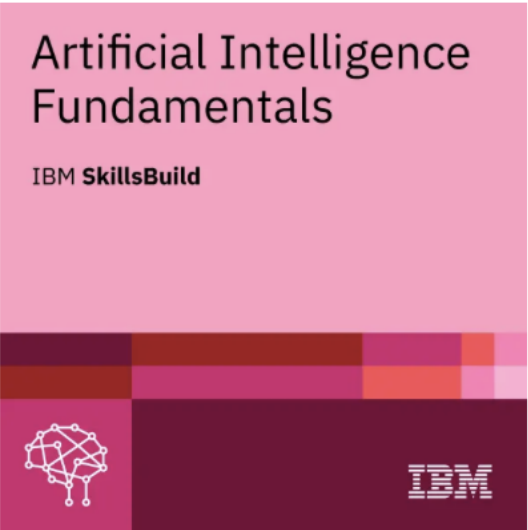


Getting Started with Artificial Intelligence

🌐 Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 3 hours

This credential earner demonstrates a foundational understanding of Artificial Intelligence concepts and processes, including common applications of AI, and generative AI. The individual has worked with generative AI tools to refine and create prompts.

[More information](#) [Start learning](#)



Artificial Intelligence Fundamentals

🌐 Languages: English, Brazilian Portuguese, Chinese (Traditional), French, Hindi, Spanish, Japanese
👤 Eligibility: Eligible to registered learners
🕒 Duration: 10+ hours

This credential earner demonstrates knowledge of artificial intelligence (AI) concepts, such as natural language processing, computer vision, machine learning, deep learning, chatbots, and neural networks; AI ethics; and the applications of AI. The individual has a conceptual understanding of how to run an AI model using IBM Watson Studio. The earner is aware of the job outlook in fields that use AI and is familiar with the skills required for success in various roles in



Introduction to Large Language Models

🌐 Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 90 minutes total course time

In this module, you'll explore the capabilities of large language models and their business applications. You'll learn about the different types of IBM Granite models and the unique features that make them ideal for enterprise use. You'll also discover how to craft effective prompts to guide these models and overcome common challenges in their use.



Build Your First Chatbot Using IBM watsonx™

🌐 Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 60 minutes total course time

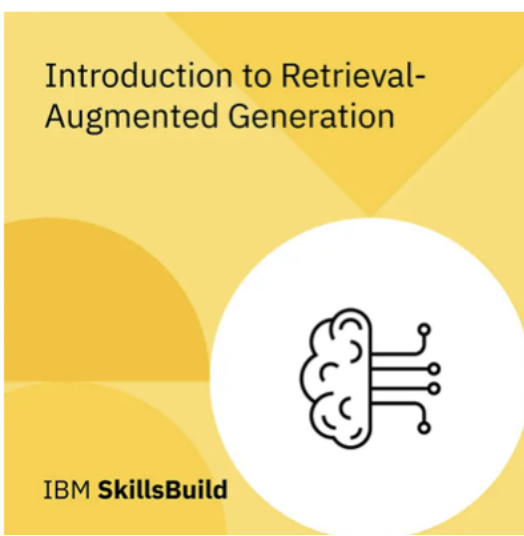
In this course, you will learn the steps to create conversational chatbots that can understand and respond to natural language. You will also understand the fundamentals of Natural Language Processing (NLP) and learn how to apply them to real-world scenarios. Through a hands-on simulation using IBM watsonx, you'll gain the skills needed to create a simple chatbot.



Ethical Considerations for Using Generative AI

🌐 Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 60-90 minutes total course time

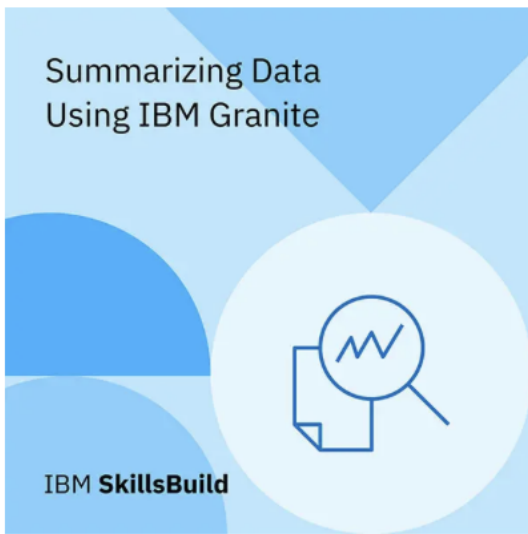
In this module, you'll explore the fascinating and complex world of ethics as they relate to generative AI. You'll learn about the pillars of transparency, accountability, and fairness. You'll discover ethical considerations and risks related to data inputs to AI systems and uncover the ethical implications of AI-generated output. Finally, you'll be introduced to the IBM AI risk atlas.



Introduction to Retrieval-Augmented Generation

🌐 Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 60-90 minutes total course time

In this module, you'll learn what RAG is and identify its key use cases. Next, you'll explore the benefits of using RAG to enhance the knowledge base of an AI model. Finally, you'll find out the key steps in the RAG workflow.



Summarizing Data Using IBM Granite

🌐 Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 60 minutes total course time

In this module, you'll explore the role of generative AI in text-based data summarization. Next, you'll learn about various IBM Granite models for text summarization and how you can choose the right model for your needs. Finally, you'll explore how to prompt IBM Granite models to summarize text.

SkillsBuild
courses only
(e-learnings)

Exploring

Featured Exploring Offerings: ibm.biz/course-catalog.

Artificial intelligence

Cybersecurity

Data science

Cloud



Getting Started with Cybersecurity

🗣️ Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 3 hours

This credential earner demonstrates a foundational understanding of cybersecurity key elements and the threats it addresses, including concepts of data privacy, and how to evaluate data security using the CIA triad model. The earner is aware of the job outlook in cybersecurity and is familiar with the skills required for success in various roles. The individual understands how a cybersecurity tool works.



Cybersecurity Fundamentals

🗣️ Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 7.5 hours

This badge earner demonstrates a foundational understanding of cybersecurity concepts, objectives, and practices. This includes cyber threat groups, types of attacks, social engineering, case studies, overall cyber security risk management strategies, cryptography, and common approaches that organizations take to prevent, detect, and respond to cyber attacks. This also includes an awareness of the job market. Badge earners can use this knowledge to pursue further education for a variety of roles in cybersecurity.



Getting Started with Threat Intelligence and Hunting

🗣️ Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 5 hours

This badge earner has completed all the learning activities included in this online learning experience, including hands-on experience, concepts, methods and tools related to the threat intelligence and hunting domain. The individual has demonstrated domain knowledge and understanding in adopting practices, methods and tools that relates to the activities performed in cyber threat hunting.



Security Operations Center in Practice

🗣️ Languages: English, Spanish, BR-Portuguese
👤 Eligibility: Eligible to registered learners
🕒 Duration: 20+ hours

This badge earner has completed all the learning activities included in this online learning experience, including hands-on experience, concepts, methods and tools related to the Security Operations Center’s domain. The individual has developed skills around techniques, technologies, roles and scenarios needed to establish the foundations of a Security Operations Center (SOC) within an organization.

SkillsBuild
courses only
(e-learning)

Exploring

Featured Exploring Offerings: ibm.biz/course-catalog

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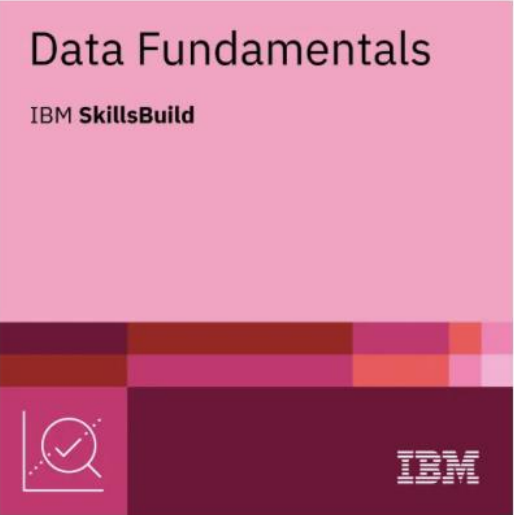
Cloud



Getting Started with Data

🌐 Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 3 hours

This credential earner demonstrates a foundational understanding of data concepts, such as types of data, big data, the data analytics process, data visualization, and the data science landscape. The individual has worked with data analytics tool to import, analyze and visualize data.



Data Fundamentals

🌐 Languages: English, French
👤 Eligibility: Eligible to registered learners
🕒 Duration: 7 hours

This credential earner demonstrates knowledge of data analytics concepts, methodologies and applications of data science, and the tools and programming languages used in the data ecosystem. The individual has a conceptual understanding of how to clean, refine, and visualize data using IBM Watson Studio. The earner is aware of the job outlook in data and is familiar with the skills required for success in various roles in the domain.



Enterprise Data Science in Practice

🌐 Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 10+ hours

This badge earner has completed all the learning activities included in this online learning experience including hands-on labs, concepts, methods, and tools related to the data science methodology. They demonstrate skills and understanding of the Data Science methodology by engaging in real-world scenarios and role-playing the process/tools used by a data science team to address real-world enterprise challenges in the insurance industry leveraging cutting-edge fraud analytics approaches and technologies.



Machine Learning for Data Science Projects

🌐 Languages: English, Spanish, BR-Portuguese
👤 Eligibility: Eligible to registered learners
🕒 Duration: 20+ hours

This earner completed all learning activities included in this online learning experience related to advanced topics core to the data science profession including: Data Modeling techniques; Machine Learning; Deep Learning algorithms; Data Science Automation; demonstration of advanced skills application in the field of Data Science by role-playing critical roles in a data science team using latest AI tools for analytics/automation to address real problems.

SkillsBuild
courses only
(e-learnings)

Exploring

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Data science

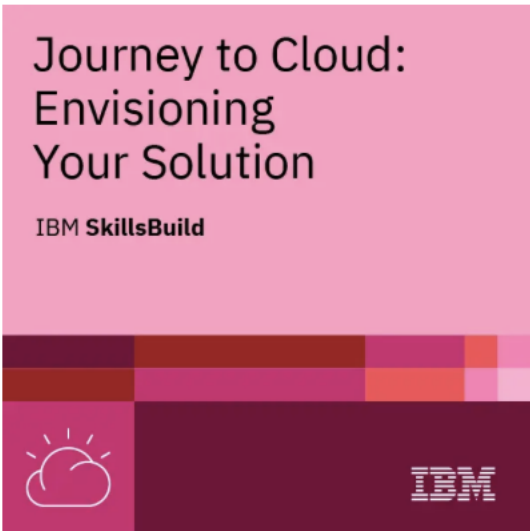
Cloud



Cloud Computing Fundamentals

🗣️ Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 10+ hours

This credential earner demonstrates knowledge of cloud computing, including cloud services, deployment models, virtualization, orchestration, and cloud security. The individual is aware of cloud benefits for users and businesses. The individual has a conceptual understanding of how to create a container, deploy a web app to the cloud, and analyze security in a simulated environment. The earner is aware of the job outlook in cloud computing and the skills required for success in various roles.



Journey to Cloud: Envisioning Your Solution

🗣️ Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 5 hours

This credential earner demonstrates knowledge and understanding of the digital transformation drivers made possible by cloud technologies and services. This includes: how cloud works, its capabilities, types, and delivery models (IaaS, SaaS, and PaaS); digital transformation strategies such as Agile practices, the IBM Garage Method, and Enterprise Design Thinking to help organizations get started on their transformation journey; and deploying a test pilot cloud application using IBM Code Engine.



Journey to Cloud: Orchestrating Your Solution

🗣️ Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 20+ hours

This credential earner demonstrates knowledge and understanding in the intricate relationship between the enterprises embracing the journey to Cloud adoption and the cloud service providers. The credential earner acquired advanced skills on cloud computing adoption concepts such as compliance, data management, data protection, cloud security, service management and operations, ITIL, incident, problem and change management, site reliability engineering, AIOps, and governance.



Journey to Cloud: Transforming Your Culture

🗣️ Languages: English
👤 Eligibility: Eligible to registered learners
🕒 Duration: 10+ hours

This credential earner demonstrates knowledge and understanding in cloud adoption concepts such as cloud culture, modern cloud practices, and the corresponding roles, with a focus on cloud development practices such as DevOps & Agile. The credential earner explores technical concepts such as cloud-native architecture, microservices, containerization, and APIs and understands what organizational changes may be required when an organization decides to migrate its workloads to the cloud.

SkillsBuild
courses only
(e-learnings)

Exploring

Willkommen auf der aktualisierten IBM Quantum-Plattform

<https://quantum.cloud.ibm.com>

Die Plattform bietet Zugang zu Quantencomputern, Dokumentation und Lernressourcen.

Melden Sie sich an, um mit der Ausführung von
Quanten-Workloads zu beginnen



Ressourcen berechnen

Zugang zu Quantenprozessoren im
Versorgungsmaßstab (QPUs)
→

Dokumentation

Erste Schritte mit Qiskit

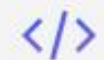


Lernen

Kurse und Tutorien erkunden



Ausgewählte Ressourcen



"Hello Welt" ausführen

Erstellen Sie ein einfaches
Quantenprogramm mit Qiskit und führen sie
es aus.

[Dokumentation ansehen](#) →



Qiskit SDK API

Legen Sie direkt los mit unserem Open-
Source-Toolkit für Quantencomputer.

[Dokumentation ansehen](#) →



Ankündigungen

Bleiben Sie auf dem Laufenden über die
neuesten Nachrichten, Ankündigungen und
Produktaktualisierungen.

[Ankündigungen ansehen](#) ↗



Tutorials

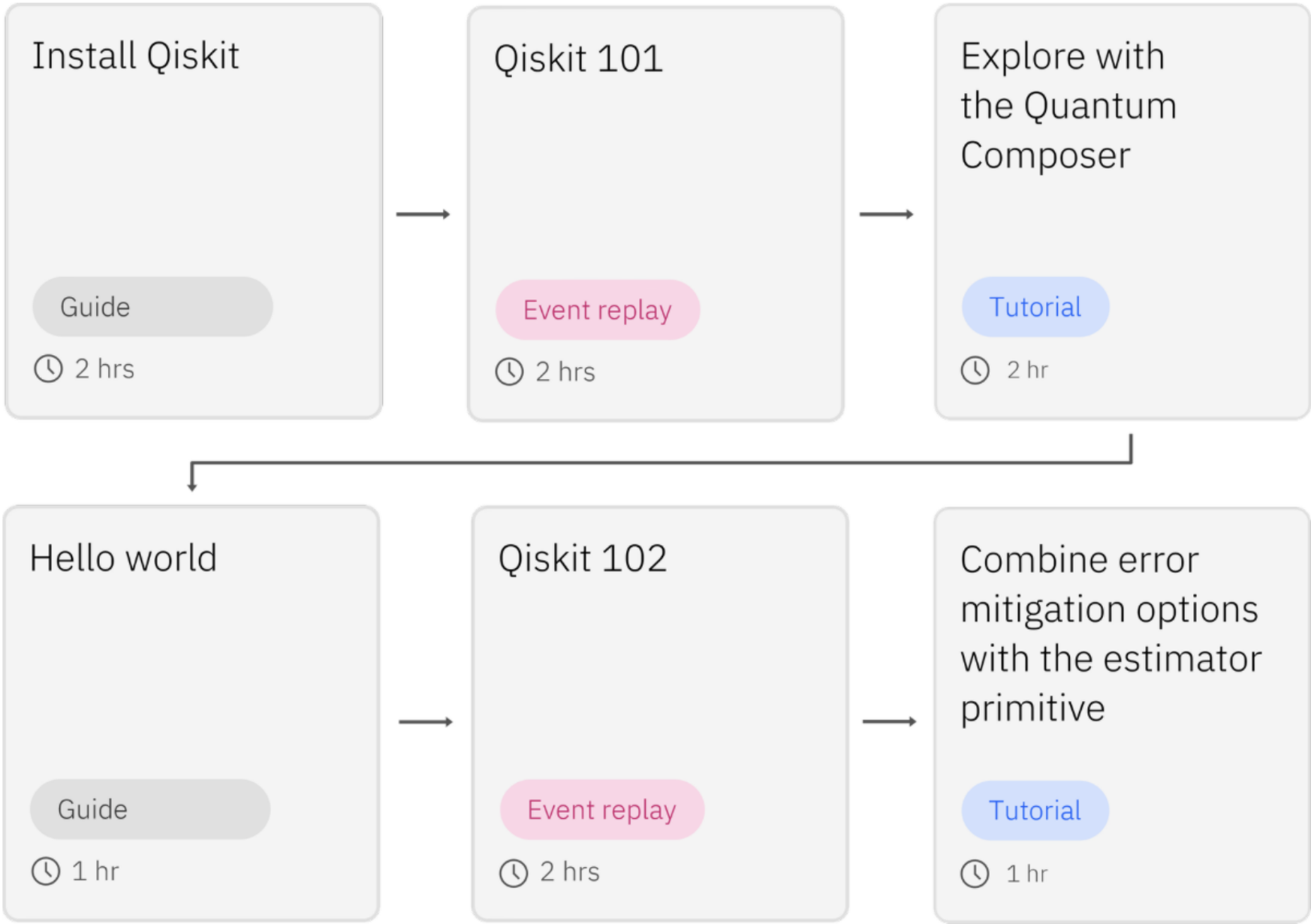
Entdecken Sie Beispiele für den Einsatz in
Versorgungsunternehmen, die die
Technologien von IBM Quantum und Qiskit
nutzen.

[Durchsuchen Sie die Tutorials](#) ↗

Example: Qiskit Learning Path

<https://quantum.cloud.ibm.com>

Learning path content



Who is this path intended for?

People with a basic understanding of quantum computing who have never used Qiskit before or want to expand their Qiskit skills:

- **Researchers and Academics:** Individuals in the fields of computer science, physics, and mathematics who want to use Qiskit for quantum computing experiments and theoretical research.
- **Developers:** Computer scientists and engineers who want to expand their skills in Qiskit as a platform for creating and testing quantum programs.
- **Industry professionals and innovation leaders:** Professionals working in various sectors like material science, physics, mathematics, cryptography, and life sciences exploring quantum computing applications for optimization problems, encryption, drug discovery, or material design.
- **Students:** Undergraduate, or graduate students learning quantum computing or related fields who want to gain hands-on experience to complement their theoretical studies.
- **Hobbyists:** Quantum computing enthusiasts who want to gain knowledge and practical experience in the basics of quantum computing.

Prerequisites

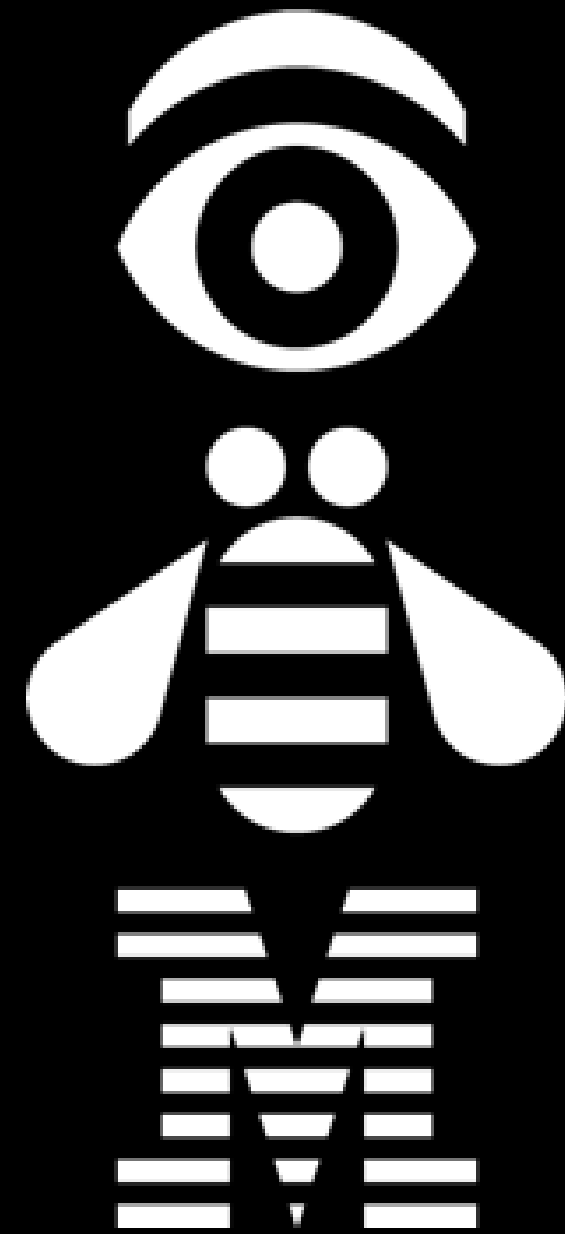
Required:

- Basic understanding of coding with Python

Recommended:

- Foundational understanding of linear algebra (matrices, vectors, complex numbers)
- Foundational understanding on classical computing concepts (algorithms and logic gates)
- Logical reasoning skills

ibm.com/academic



Thank you!