# Competence Profile for Cand.Merc.IT (Data Science)

The study program is a research-based, full-time graduate level program with a diversity of learning activities in the blended learning format (lectures, in-class exercises, mandatory assignments, tool-training workshops, individual and group projects, internships, etc.). We emphasize socio-technical interactions with other students, real-world business datasets from companies, and research-based and commercial tools and throughout the program. The candidates from the Cand.Merc.IT study program’s 30+ years history have had good job opportunities as, for example, consultants, IT project managers, application managers, and system designers. Similarly, candidates from the new specialization of Data Science in the Cand.Merc.IT study program will have extremely good job opportunities as business analysts, big data analysts, data science specialists, data science consultants, business analysis architects, data compliance architects, and data entrepreneurs.

## Domain competencies

* a high scientific level within design, development, adoption, implementation, evaluation and exploitation of data science for business IT and economics (architectures and infrastructures for business data analytics, visual analytics, text analytics, predictive analytics, data stewardship, data management, data compliance, data regulation, data security, data privacy and data ethics)
* ability to apply theories, frameworks, algorithms, methods, techniques, and tools to analyze, describe, and solve complex and interdisciplinary challenges within design, development, adoption, implementation, and exploitation of both internal and external business data pipelines for organizations
* Analyze various data pipelines with an analytical focus on deriving meaningful facts, actionable insights valuable outcomes, and sustainable impacts to support organizational processes and functions
* a solid understanding of and ability to aid technical, managerial, and societal aspects of digitalization
* a global and local perspective on digital strategies, data pipelines and data-based business models
* IT-enabled methods, techniques and tools to support data-driven organizational decision making
* facilitate and integrate data-driven decision making into organizational practices

## Academic profile and competencies

* ability to acquire, produce, and use new knowledge with data science and within new domain areas
* a comprehensive analytical and conceptual set of competences in Data Science in accordance with normal academic skills
* conceptualize data-driven architectures and data-driven decision making to support organizational strategies
* innovative capacity and capability to independently reflect and take action
* oral and written communication and technical documentation

## Practical and operational competencies:

* ability to work independently and in teams including interdisciplinary groups
* ability to work with people with diverse professional and academic competences
* ability to work in local, national, and international environments
* ability to box-in complex problems and take forward actions in situations with uncertainty of outcome or data in-completeness