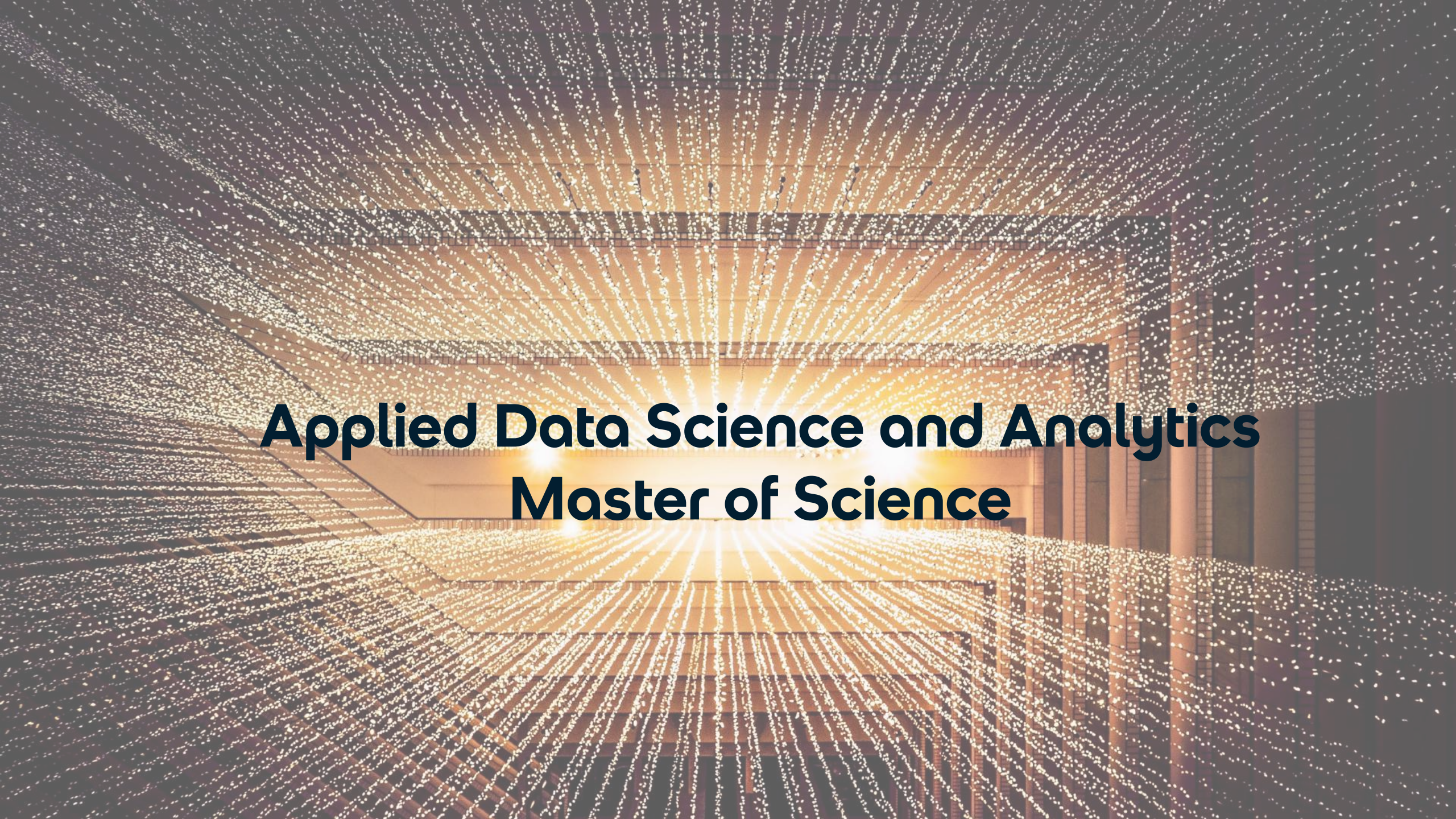


Applied Data Science and Analytics
Master of Science

Big Data - Challenges

Difficulty in finding patterns and insights

Discovery

Messy, Inconsistent, Incomplete

Data Quality

Analytics

Performing right analysis

Storage

Problem managing large amount of data sets

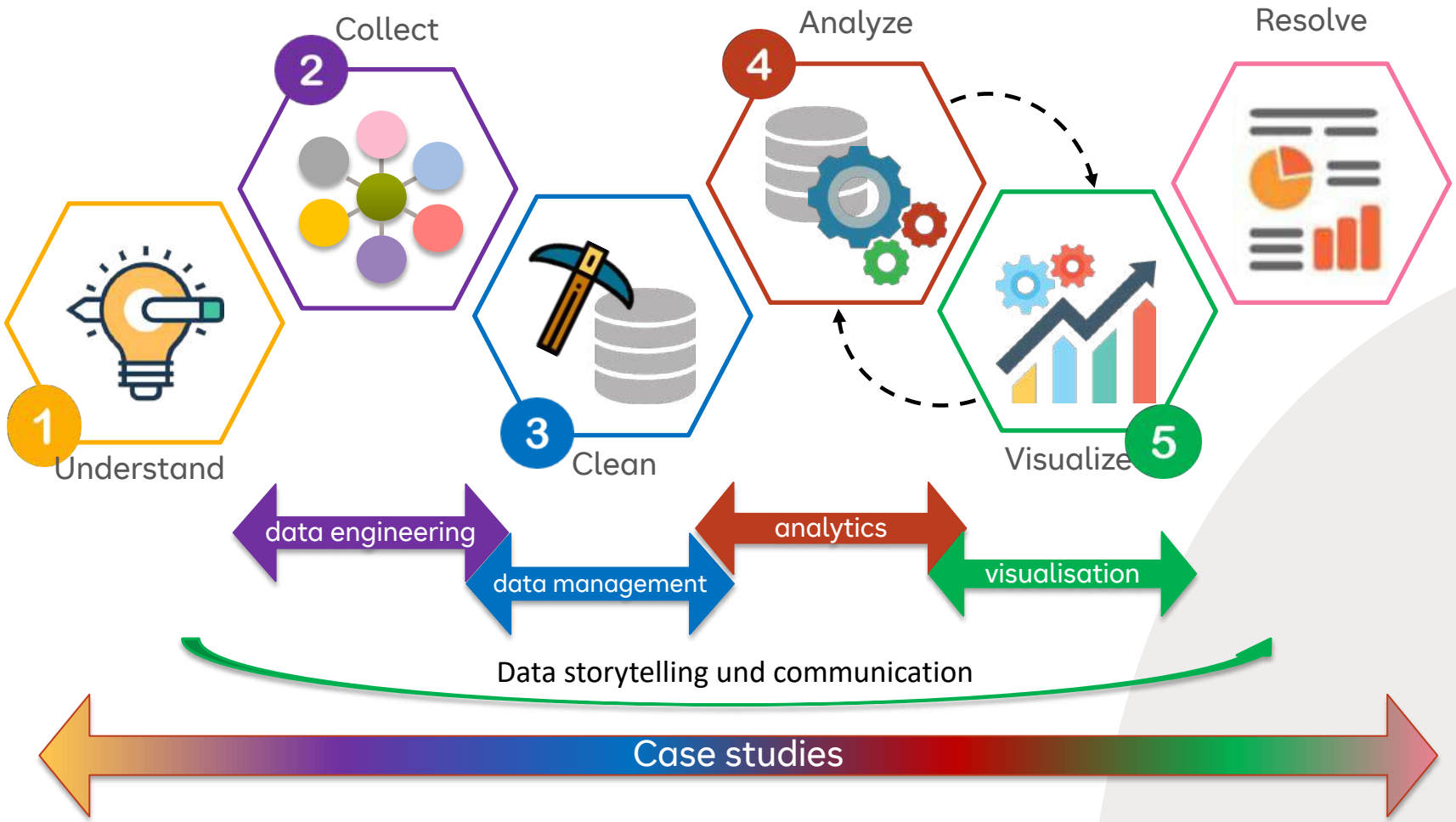
Security

Keeping data secure is a challenge

Learning Outcomes

- In-depth knowledge and understanding of **Applied Data Science.**
- Application of **analytical techniques and machine Learning/deep Learning** algorithms to solve complex data problems in business.
- Skills you need to leverage **data to reveal valuable insights** and help make customers valuable decisions.
- **Formulate technical problem solutions** and represent them in discourse.

Masters in Applied Data Science and Analytics



Course Curriculum

1. Semester	Fundamental Data Science and Analytics				2. Semester	Intermediate Data Science and Analytics			
	Block 1	Block 2	Block 3	Block 4		Block 5	Block 6	Block 7	Block 8
	First Steps into Case Studies (5 CP)	Data Analytics 1: Statistics and Machine Learning (8 CP)	Data Engineering 1: Big Data Databases (5 CP)	Data Management 1: Data Acqusition and Data Cleaning (4 CP)		Data Analytics 2: Text Mining and Natural Language Processing (7 CP)	Data Engineering 2: Big Data Architectures (6 CP)	Data Visualization and Storytelling 1: Designing Interactive Dashboards (5 CP)	Privacy, Ethics & International Law (6 CP)
	Data Visualization and Storytelling 1: Design Basics (2CP)	Big Data Programming : Python (6 CP)				Case Study 1 (8 CP)			
3. Semester	Advanced Data Science and Analytics				4. Semester	Expert Data Science and Analytics			
	Block 9	Block 10	Block 11	Block 12		Block 13	Block 14	Block 15	Block 16
	Data Management 2: Data Curation and Data Management (4 CP)	Data Analytics 3: Deep Learning (8 CP)	Elective Module: Case Study 2 or Internship (14 CP)			Master thesis project (27 CP)			
	Data Visualization and Storytelling 2: Advanced Data Visualization (5 CP)								

Study according to the CORE principle

Competence Oriented Research and Education

Our activated teaching & learning method

- Group project, Flipped classroom, case studies, project pitches from local companies
- Practical teaching and exams
- 5-week blocks – no end of the semester exam stress!
- Focus only on 1-2 subjects in 5 week blocks
- Direct contact hours with professors

core

srh

Thank you!!

Prof. Dr. Swati Chandna
Study Programme Director
Applied Data Science and Analytics, M.Sc.
Swati.chandna@srh.de

Admissions Office
Studyinheidelberg@srh.de

Connect with your students on Unibuddy

@hsheidelberg

@SRHHochschuleHD

@SRHHochschuleHD

@SRH HochschuleHeidelberg