



Course and Examination Fact Sheet: Autumn Semester 2020

7,907: Business Analytics

ECTS credits: 5

Overview examination/s

(binding regulations see below)

Decentral - Group examination paper (all given the same grades) (65%)

Examination time: term time

Decentral - Written examination (35%, 60 mins.)

Examination time: term time

Attached courses

Timetable -- Language -- Lecturer

[7.907,1.00 Business Analytics \(CEMS exclusive course\)](#) -- Englisch -- [Beese Jannis](#)

Course information

Course prerequisites

This is a CEMS exclusive course. Otherwise, no specific entry requirements.

Learning objectives

Learning objectives:

- Understand fundamental data structures and design principles used in business analytics.
- Know how to source, store, and process large amounts of data and how to extract information from data.
- Be able to use state-of-the-art commercial Business Analytics tools: Data modeling, SQL queries, standard reporting, multidimensional online analysis, data mining.
- Understand high-level architectural designs of business analytics applications and their integration with other systems and business processes.
- Understanding the changing scope and role of MIS, Business Intelligence and Business Analytics.
- Have an idea about the current issues and future developments in the field of Business Analytics beyond the technical perspective.

Course content

Business Analytics denotes the discipline that supports decision makers, knowledge workers and (partially) automated processes by converting data into information. This course will cover identifying, sourcing, storing, aggregating and integrating data as well as assuring data quality and compliance. Furthermore, students are taught how to understand decision needs, facilitate information use, and create data driven business insights.

In addition to conceptual, architectural and organizational/management aspects of Business Analytics, several state-of-the-art commercial tools will be used to work on in-class assignments.

Course structure

The course consists of nine half day modules. Every module usually consists of a knowledge (presentation & discussion) component and a tutored exercise/assignment component.

Course literature

For every half-day module, lecture notes (that include references as well as recommended additional reading materials) will be provided one week in advance so that students can prepare for the discussion of the material in class.



Additional course information

In the case of the President's Board having to implement new directives due to the SARS-CoV-2 pandemic in AS2020, the course information listed above will be changed as follows:

- The course is conducted online via the Zoom platform
- The recordings of the course are permanently available
- The lecturer informs via StudyNet and e-mail on the changed implementation modalities of the course

The examination information listed below would be changed as follows:

- The exercises and written examinations are conducted online and are being recorded

Examination information

Examination sub part/s

1. Examination sub part (1/2)

Examination time and form

Decentral - Group examination paper (all given the same grades) (65%)

Examination time: term time

Remark

Assignments using business analytics tools.

Examination-aid rule

Term papers

Term papers must be written without anyone else's help and in accordance with the known quotation standards, and they must contain a declaration of authorship which is a published template in StudentWeb.

The documentation of sources (quotations, bibliography) has to be done throughout and consistently in accordance with the chosen citation standard such as APA or MLA.

For papers in law, the legal standard is recommended (by way of example, cf. FORSTMOSER, P., OGOREK R. et SCHINDLER B., *Juristisches Arbeiten: Eine Anleitung für Studierende*, newest edition respectively, or according to the recommendations of the Law School).

The indications of the sources of information taken over verbatim or in paraphrase (quotations) must be integrated into texts in accordance with the precepts of the applicable quotation standard, while informative and bibliographical notes must be added as footnotes (recommendations and standards can be found, for example, in METZGER, C., *Lern- und Arbeitsstrategien*, newest edition respectively).

For any work written at the HSG, the indication of the page numbers is mandatory independent of the chosen citation standard. Where there are no page numbers in sources, precise references must be provided in a different way: titles of chapters or sections, section numbers, acts, scenes, verses, etc.

Supplementary aids

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Examination languages

Question language: English

Answer language: English

2. Examination sub part (2/2)



Examination time and form

Decentral - Written examination (35%, 60 mins.)

Examination time: term time

Remark

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Examination-aid rule

Open Book

Students are free to choose aids but will have to comply with the following restrictions:

- All the pocket calculators that are not of the Texas Instruments TI-30 series are explicitly inadmissible.
- In addition, any type of communication, as well as any electronic devices that can be programmed and are capable of communication such as electronic dictionaries, notebooks, tablets, mobile telephones and others, are inadmissible.
- Students are themselves responsible for the procurement of examination aids.

Supplementary aids

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Examination languages

Question language: English

Answer language: English

Examination content

The examination content corresponds to the courses learning objectives. Students need to demonstrate that they:

1. Understand fundamental data structures and design principles used in business analytics.
2. Know how to source, store, and process large amounts of data and how to extract information from data.
3. Are able to use state-of-the-art commercial Business Analytics tools: Data modeling, SQL queries, standard reporting, multidimensional online analysis, data mining.
4. Understand high-level architectural designs of business analytics applications and their integration with other systems and business processes.
5. Understand the changing scope and role of MIS, Business Intelligence and Business Analytics.
6. Have an idea about the current issues and future developments in the field of Business Analytics beyond the technical perspective.

Examination relevant literature

All readings and cases as well as the lecture notes will be provided electronically. Software access will be provided using a state-of-the-art teaching portal (www.TeradataUniversityNetwork.com) as well as several open-source software tools.



Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW51) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 42 are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 34 (Thursday, 20 August 2020);
- Examination information (regulations on aids, examination contents, examination literature) for decentralised examinations: in CW 42 (Monday, 12 October 2020);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 42 (Monday, 12 October 2020);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised examinations: two weeks before the end of the registration period in CW 44 (Thursday, 29 October 2020).