

COURSE DETAIL

BIG DATA

Country

Netherlands

Host Institution

Wageningen University and Research Center

Program(s)

Wageningen University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Statistics Bioengineering

UCEAP Course Number

100

UCEAP Course Suffix**UCEAP Official Title**

BIG DATA

UCEAP Transcript Title

BIG DATA

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

This course discusses both the key concepts of Big Data and provides hands-on-experience in developing and using Big Data systems. It introduces concepts related to Big Data system architectures, distributed file systems, the Map-Reduce framework, Resilient Distributed Data sets, and scalable linear and machine learning models, and how they are made available with cutting-edge technologies such as the Hadoop Distributed File System and Apache Spark. Students practice with tools with individual tutorials, and gain hands-on experience by working on a group project formed as a "data challenge". Students demonstrate the use of the tools learned in the course, but also their creativity as data scientists, that includes communicating the value of their findings with visualization tools. The course covers the following topics: the basic concepts related to Big Data and data-driven value-creation in the environmental, social and life sciences; Big Data methods for designing scalable applications in the environmental, social and life sciences; the role of various tools in the Big Data ecosystem; data analytics for discovery, and data visualization for communication of meaningful patterns in data.

Language(s) of Instruction

English

Host Institution Course Number

INF-33806

Host Institution Course Title

BIG DATA

Host Institution Campus

Soil, Water, and Atmosphere

Host Institution Faculty

Host Institution Degree

Host Institution Department

Information Technology

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