



IPSDS

INTERNATIONAL PROGRAM
IN SURVEY & DATA SCIENCE

Coordination & Funding



SPONSORED BY THE



Federal Ministry
of Education
and Research

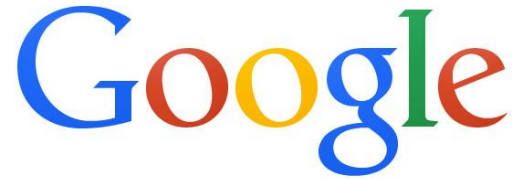


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International Faculty from Partner Universities



International Faculty from the Industry



Institute for Employment
Research

The Research Institute of the
Federal Employment Agency



Learning objectives / Modules

Data Output/Access

Learn how to communicate results and distribute and store your data

Data Analysis

Learn a variety of analysis methods suited for different data types

Data Curation/Storage

Learn how to curate and manage data

Data Generating Process

Understand how to collect data yourself, and how data are generated through administrative and other processes.

Research Question

Learn how to formulate your research goal and which data are best suited to achieve it.

All courses 2019/2020

Research Question

Fundamentals of Survey and Data Science

Data Generating Process

Data Collection Methods

Experimental Design For Surveys

Questionnaire Design

Sampling Theory

Usability Testing for Survey Research

Web Scraping and API

Web Survey Methodology

Data Curation/Storage

Introduction to Python and SQL

Introduction to Real World Data Management

Introduction to Record Linkage with Big Data Applications

Data Analysis

Analysis of Complex Survey Data

Big Data and Machine Learning

Computer-Based Content Analysis I (Theory) & II (Practical Project)

Generalized Linear Models

Introduction to Small Area Estimation

Item Nonresponse and Imputation

Measurement Error Models

Multiple Imputation – Why and How

Practical Tools for Sampling Part I

Project Consulting Course

Usability Testing for Survey Research

Data Output/Access

Data Confidentiality and Statistical Disclosure Control

Introduction to Data Visualization

Privacy Law

Flexible & engaging online learning environment

- Online learning environment accessible from anywhere in the world (taught in English)
- Small virtual classroom with a mix of synchronous & asynchronous learning
 - *Pre-recorded lectures split into small video units*
 - *Required readings and (bi)weekly assignments*
 - *Discussion forums*
 - *Weekly online meetings*
- On-site networking activities with fellow students from five continents
- Wide variety of options: from individual courses or course sequences to a modular program

8-10h per week





Corporate Partnership Possibilities

Join individual courses that start in March 2019

Research Question

Fundamentals in Survey &
Data Science

Data Generating Process

Questionnaire Design

Web Scraping & API

Data Analysis

Big Data & Machine Learning

Generalized Linear Models

Measurement Error Models

Practical Tools for Sampling Part I

Data Output/Access

Data Confidentiality & Statistical
Disclosure Control

Introduction to Data Visualization



2-Day event: May 31st /June 1st

- Yearly networking event
- Day1: create a community within IPSDS students
- Day2: open to audience interested in data science.

How can corporate partners contribute?

- Present a case study
- Engage as speaker
- Host a workshop/tutorial



1-Day event: March 25th

- Conference following Stanford's tradition
- Inspire and educate data scientists worldwide
- Support women in the field

How can corporate partners contribute?

- Introduce your career, research and specific projects in the Data Science field
- Take part in career panel & discussion groups



3-Day event: May 3rd - 5th

- Data analysis competition where teams of up to five students attack a large, complex, and surprise dataset over a weekend

How can corporate partners contribute?

- Sponsor the event
- Meet talents @ the Career Fair (May 4th)

Thank you for your attention!

survey-data-science.net