

## Day-to-day programme

### HANDS-ON PROCESS MINING

16.08.2021 - 20.08.2021

Course Director: Dr. ir. Marlies van Steenbergen

E-mail: marlies.vansteenbergen@hu.nl

In this course you learn the theoretical principles underlying process mining, as well as getting hands-on experience on real-life data. All relevant steps of process mining will be addressed: setting a goal, retrieving data, building an event log, applying process mining algorithms and interpreting the results. Examples are derived from various application areas, concerning internal business processes as well as customer journeys.

The course distinguishes two tracks: a theoretical track in which the theory of process mining is discussed and a practical track in which you execute a process mining assignment. During the entire course you will work in teams on a report investigating a specific process mining theme.

#### Program Content

The aim of the course is to provide course members with insights and practical experience on process mining. The balanced combination of theory and practice enables the participants to gain a comprehensive knowledge of process mining they can apply in actual environments. The lessons presenting the theory of process mining will be interspersed with exercises and working on a case throughout the week.

Week 1

*All times are indicative and can be subject to change*

Monday, August 16		
Time	Activity	Description
10:00-12:00	Lecture	Overview of process mining: application areas; approaches; concepts; tools; setting up a process mining project.
12:00-13:00	Lunch	
13:00-17:00	Lecture	Getting to know the tools.

Tuesday, August 17		
Time	Activity	Description
09:00-12:00	Lecture/Group assignment	How to build an event log; data sources; data challenges; examining the data; data conversion.  ProM.  Getting started with the group assignments.
12:00-13:00	Lunch	
13:00-17:00	Lecture/Group assignment	Creating the case event log. Loading the event log into the tooling. Preparing the event log for analysis.  Starting the presentation.

Wednesday, August 18		
Time	Activity	Description
09:00-12:00	Lecture/Group assignment	Discovery techniques; From traces to model; quality of models
12:00-13:00	Lunch	
14:00-17:00	Lecture/Group assignment	Creating models from the event log. Interpreting and tuning the model.  Working on the presentation.

Thursday, August 19		
Time	Activity	Description
09:00-12:00	Lecture/Group assignment	Conformance checking: checking event logs against business process models.
12:00-13:00	Lunch	
13:00-17:00	Lecture/Group assignment	Playing the case event log against a pre-defined or discovered process model.  Working on the presentation.

Friday, August 20		
Time	Activity	Description
09:00-12:00	Lecture/Group assignment	Social network mining; additional data sources; predictive analytics; research topics.  Finishing the presentation.
12:00-13:00	Lunch	
13:00-17:00	Group assignment	The teams present their cases.

For information about the social program, please have a look at [https://www.utrechtsummerschool.nl/social\\_programme](https://www.utrechtsummerschool.nl/social_programme)