

Every participant should bring a computer with pre-installed R and RStudio (free software) which you will need to install on your laptop before the course.

## Monday, 6 October 2025

**08:45 – 09:00 Welcome and Introduction**

Jacques-Emmanuel Galimard &  
Luuk Gras

### 09:00 – 13:00 Session I: Basic Statistics and Descriptive Analysis

09:00 – 09:30 Collecting data / Database creation

Jacques-Emmanuel Galimard

09:30 – 10:30 Descriptive analyses

Jacques-Emmanuel Galimard

### 10:30 – 11:00 Coffee break

11:00 – 12:00 Hypothesis testing and statistical tests

Jacques-Emmanuel Galimard

12:00 – 13:00 Introduction to R and RStudio I

Dirk-Jan Eikema  
*Jacques-Emmanuel Galimard &  
Allain-Thibeault Ferhat & Luuk Gras*

### 13:00 – 14:00 Lunch break

### 14:00 – 18:00 Session II: R and R Studio

14:00 – 15:00 Introduction to R and RStudio II

Dirk-Jan Eikema  
*Jacques-Emmanuel Galimard &  
Allain-Thibeault Ferhat & Luuk Gras*

15:00 – 16:30 Descriptive analyses: practical session (R)

Dirk-Jan Eikema  
*Jacques-Emmanuel Galimard &  
Allain-Thibeault Ferhat & Luuk Gras*

16:30 – 18:00 Logistic regression and linear regression

Luuk Gras

**Tuesday, 7 October 2025**

**09:00 – 17:00 Session III: Survival Analysis**

|                      |                                                                               |                                                                                                 |
|----------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 09:00 – 10:00        | Confounding                                                                   | Luuk Gras                                                                                       |
| 10:00 – 11:00        | Linear regression, logistic regression and confounding: practical session (R) | Jarl Mooyaart<br><i>Allain-Thibeault Ferhat &amp; Jacques-Emmanuel Galimard &amp; Luuk Gras</i> |
| <b>11:00 – 11:30</b> | <b>Coffee break</b>                                                           |                                                                                                 |
| 11:30 – 12:00        | Censored data / survival and hazard functions                                 | Jacques-Emmanuel Galimard                                                                       |
| 12:00 – 13:00        | Kaplan Meier curves & Log rank test                                           | Allain-Thibeault Ferhat                                                                         |
| <b>13:00 – 14:00</b> | <b>Lunch break</b>                                                            |                                                                                                 |
| 14:00 – 15:00        | Kaplan Meier curves & Log rank test: practical session (R)                    | Allain-Thibeault Ferhat<br><i>Jarl Mooyaart &amp; Jacques-Emmanuel Galimard &amp; Luuk Gras</i> |

**15:00 – 17:00 Session IV: Cox proportional hazards model**

|               |                                             |                    |
|---------------|---------------------------------------------|--------------------|
| 15:00 – 16:00 | Cox model : introduction                    | Liesbeth de Wreede |
| 16:00 – 17:00 | Cox model: proportionality / stratification | Liesbeth de Wreede |

**Wednesday, 8 October 2025**

**09:00 – 17:00    Session V: Cox model**

|                      |                                      |                                                                     |
|----------------------|--------------------------------------|---------------------------------------------------------------------|
| 09:00 – 10:30        | Cox model: practical session I (R)   | Mouad Abouqateb<br><i>Jacques-Emmanuel Galimard &amp; Luuk Gras</i> |
| <b>10:30 – 11:00</b> | <b>Coffee break</b>                  |                                                                     |
| 11:00 – 11:45        | Cox model: Interactions              | Liesbeth De Wreede                                                  |
| 11:45 – 12:45        | Cox model: practical session II (R)  | Mouad Abouqateb<br><i>Jacques-Emmanuel Galimard &amp; Luuk Gras</i> |
| <b>12:45 – 13:45</b> | <b>Lunch break</b>                   |                                                                     |
| 13:45 – 15:00        | Cox model: Time dependent variables  | Hein Putter                                                         |
| 15:00 – 16:00        | Cox model: practical session III (R) | Mouad Abouqateb<br><i>Jacques-Emmanuel Galimard &amp; Luuk Gras</i> |
| 16:00 – 17:00        | Missing baseline values              | Jacques-Emmanuel Galimard                                           |
| <b>19:30</b>         | <b>Farewell dinner</b>               |                                                                     |

**Thursday, 9 October 2025**

**08:30 – 13:00 Session VI: Competing risks**

08:30 – 10:30 Competing risks: cumulative incidence and  
cause-specific hazard

Simona Iacobelli

**10:30 – 11:00 Coffee break**

11:00 – 13:00 Competing risks: practical session (R)

Mouad Abouqateb  
*Jacques-Emmanuel Galimard &  
Luuk Gras*

**13:00 – 14:00 Lunch break**

**14:00 – 16:00 Session VII: Study Design**

14:00 – 15:00 Different study designs & biases

Simona Iacobelli

15:00 – 16:00 Statistical mistakes commonly made in survival  
analysis

Hein Putter

**16:00 – 16:10 Closing remarks**