

# I NSTRUCTORS

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# I NFORMATION

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# R EGISTRATION

Includes five days of lectures, coffee and lunch, visits to Volvo Cars and Autoliv, and course dinner

## Early Registration (until 2 April 2023)

Professional – 12 000 SEK  
Student – 4 000 SEK

## Standard Registration (after 2 April 2023)

Professional – 14 000 SEK  
Student – 5 000 SEK

*Fees are excl VAT.*

# SAFER

VEHICLE AND TRAFFIC SAFETY CENTRE AT CHALMERS

## 8<sup>th</sup> International Advanced Course on Injury Biomechanics

12-16 June 2023  
SAFER  
Lindholmen Science Park  
Gothenburg, Sweden

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Hosted by SAFER



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# WELCOME

The subjects covered this week will include historical, contemporary, and emerging biomechanical science, injury risk functions, test devices, and regulations in car safety and sport.

We are targeting the course towards graduate students, safety engineers, researchers, biomedical engineers, and those interested in injury biomechanics.

The unique aspects of the course will involve active and open discussion with researchers and lecturers, interactive crash case reviews, a visit to crash test facilities, and networking with others within your field.

You will gain the most benefit from this course by actively engaging with your fellow course participants and instructors during the lectures, breaks, and lunches. This is a relaxed and friendly environment!

# AGENDA

## DAY 1

- 8:30 Course Introduction
- 9:00 Intro to Injury Biomechanics
- 10:45 Injury Scales
- 11:30 Epidemiology and Field Data
- 12:15 Lunch
- 13:45 Tissue Biomechanics
- 14:45 PMHS Testing and Dummies
- 16:00 Human Body Models
- 16:45 Injury Criteria

## DAY 2

- 8:30 Crash Investigation Part 1
- 9:15 Head and Brain
- 10:45 Thorax and Elderly
- 12:15 Lunch
- 13:45 Spine
- 15:30 Upper Extremities
- 16:30 Crash Investigation Part 2

## DAY 3

- 8:30 Crash Investigation Part 3
- 9:15 Abdomen
- 10:45 Pelvis and Obesity
- 12:15 Lunch
- 13:45 Lower Extremities
- 15:30 Volvo Cars Factory Tour

## DAY 4

- 8:30 Crash Investigation Part 4
- 9:30 Restraint Systems
- 10:45 US Vehicle Testing Programs
- 11:15 EU Vehicle Testing Programs
- 12:15 Lunch
- 13:00 Autoliv Crash Lab Tour
- 18:00 Course Dinner

## DAY 5

- 9:00 Pediatric Biomechanics
- 9:45 Pediatric Restraint Systems
- 10:45 Helmet Safety
- 11:30 PTW Safety
- 12:15 Lunch
- 13:45 New Biomechanics Research
- 14:30 Population Diversity
- 15:15 Wrap-Up



7<sup>th</sup> International Advanced Course on Injury Biomechanics  
Comillas University, Madrid, Spain