

Trauma Biomechanics**Information about lectures**

40 hours course on “Trauma Biomechanics”

Target auditorium – I, II and III study cycle students from biomechanics, mechanical engineering, and transport engineering.

Lectures – fundamental theory, concepts, knowledge

Exercise – focus on practical aspects of knowledge application.

Seminar – exchange of information and discussions about topics of interests

Schedule of the lectures

Day	Topic	Type of lecture	Dur.	Date and time	Room
Basic knowledge					
1	Introduction / Injury models and failure of biological tissue	Lecture	2	2021.03.22 10 ²⁰ -11 ⁵⁵	Online
	Analysing accidents	Practice	2	2021.03.22 12 ¹⁰ -13 ⁴⁵	Online
2	Head injury	Lecture	2	2021.03.23 14 ³⁰ -16 ⁰⁵	Online
	Sports helmets	Practice	2	2021.03.23 16 ²⁰ -17 ⁵⁵	Online
3	Trauma to the spine and thorax	Lecture	2	2021.03.24 14 ³⁰ -16 ⁰⁵	Online
	Concepts of injury prevention	Practice	2	2021.03.24 16 ²⁰ -17 ⁵⁵	Online
4	Injury to the upper and lower extremities	Lecture	2	2021.03.25 14 ³⁰ -16 ⁰⁵	Online
	Safety applications in sports	Practice	2	2021.03.25 16 ²⁰ -17 ⁵⁵	Online
5	Experiments in trauma biomechanics	Lecture	1	2021.03.26 14 ³⁰ -15 ¹⁵	Online
	Experiments in trauma biomechanics	Practice	1	2021.03.26 15 ²⁰ -16 ⁰⁵	Online
Special topics of trauma biomechanics					
6	Computer simulations	Lecture	2	2021.05.10 10 ²⁰ -11 ⁵⁵	tba
	Student project	Practice	2	2021.05.10 12 ¹⁰ -13 ⁴⁵	tba
7	Occupant protection	Lecture	2	2021.05.11 14 ³⁰ -16 ⁰⁵	tba
	Student project	Practice	2	2021.05.11 16 ²⁰ -17 ⁵⁵	tba
8	Pedestrian Impact	Lecture	2	2021.05.12 14 ³⁰ -16 ⁰⁵	tba
	Student project	Practice	2	2021.05.12 16 ²⁰ -17 ⁵⁵	tba
9	Trauma in children and elderly	Lecture	2	2021.05.13 14 ³⁰ -16 ⁰⁵	tba
	Exam	Practice	2	2021.05.13 16 ²⁰ -17 ⁵⁵	tba
10	Student competition	Lecture	2	2021.05.14 14 ³⁰ -16 ⁰⁵	tba
	Summary /Wrap-up and final discussion	Lecture	2	2021.05.14 16 ²⁰ -17 ⁵⁵	tba