

## Applied Maths & Physics 2 (1DAE-GD)

### Theo-CONTENT

Theo01. Parameters

Theo02. Béziers

Theo03. Dynamics (Newtonian)

Theo04. Collision handling

Theo05. Inverse Kinematics 2D

Theo06. Inverse Kinematics 3D

**Theo07.+Lab (no lessons due to the midterm Q-week)**

Theo08. Complex arithmetics

Theo09. Complex 2D rotation

Theo10. Quaternion arithmetics

Theo11. Quaternion 3D rotation

**Theo12. no lessons due to the CreaweeK (aim: Workshop Inverse Kinematics 3D)**

### APPROACH

Theory: 2T weekly, Midterm-tested pen & paper (or remote)

Lab: 2L, Midterm-tested pen & paper (or remote), open-book including test tool-use (*strategic competence: when to use which operation*) on laptops-in-flight-mode

ExerciseAtHome (bridging previous theory to successive lab) **via Leho/Assignments**

### GRADING

#### **1<sup>st</sup> Exam chance**

10%ExercisesAtHome + 45%Midterm(T+L) + 45%Final(T+L)

#### **2<sup>nd</sup> Exam chance**

40%T + 60%L exam

### MATERIALS

ISBN 978-9401432047 (Animation Maths, LannooCampus)

Tool: **GeoGebra5+** (<https://www.geogebra.org/>)