

3D Coordinate Systems (GE)

Lecture Intro

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The slides have been created by Cyrill Stachniss.

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This Course

- Course is taught by **all groups** at IGG
- 90-120 min each block
- **Basic knowledge** about the different coordinate systems commonly used
- Example for photogrammetry/robotics
 - 2D/3D Euclidean space
 - Representations of 3D rotations
 - Homogeneous coordinates

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Expectations

- Teach basic skills that you will need
- **Understand** the key concepts
- Ability to **apply them as a tool**
- **Ask questions** – not only during the tutorials
- **No plagiarism**

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Timing Estimate for This Course

- 3 ECTS points = 90h workload
- Exam preparation = 30h
- Lecture & tutorial = 30h (15 weeks, 2h per week)
- 30h = 2h/week for exercises

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Exercises

- **Mandatory homework assignments** for obtaining exam admission
- Every student hands in an own solution
- Time to solve assignments: see **deadline on assignment** sheet!
- All homework assignments must be correctly solved
- Not accepted assignments have to be handed in again (~2 weeks later)

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Exam

- Written exam at the end of the course
- Prerequisite for the exam: 100% accepted homework assignments

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Let's get started...

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