

Course: Dynamics

credits: 3

Course code WBVH22DN
Name Dynamics
Study year 2022-2023
ECTS credits 3
Language English
Coordinator J.T. Hofman

Modes of delivery Education
Assessments Dynamics - Computer, organised by STAD examinations

Learning outcomes

After finishing this module the student:

- composes a kinematic diagram (KD) of a dynamic loaded object
- solves dynamic problems with respect to geometric aspects of movements using linear and angular position, acceleration and velocity
- solves dynamic problems with respect to linear and angular position, acceleration and velocity using the resulting forces and moments
- solves dynamic problems with respect to linear and angular position, acceleration and velocity using the principles of work and energy
- calculates required power and energy losses of dynamically loaded objects

Content

Various products use moving parts to fulfill their function. Product development, therefore, requires insight in the kinetics. This course (3 EC) deals with various aspects of dynamically loaded parts. Subjects ranges from loads and accelerations to energy requirements. Both linear and rotational movements will be addressed.

Included in programme(s)

Mechanical Engineering VWO a 3-year variant

School(s)

Institute of Engineering

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