

Invitation to the block course “*Energy Methods in Material Modeling*”

Course dates:

Introduction to the course on **November 2nd, 2016**, starting **17:00**. IC 03 / 604 (south)

IC 03 / 606 (south) IC 03 / 610 (south)

Course dates: two Saturdays (5.11., 10.12.16), 10:00-18:00 +
Wednesdays (9.11., 16.11., 23.11., 30.11., 7.12.16), 17:00-21:00 IC 03 / 604 (south)

Exam: Sunday 22.1.17, 12:00-16:00, Room IC 03/606

Target group:

Master students (e.g. 3rd semester “Computational Engineering” / “Materials Science and Simulation”, 2nd semester “Maschinenbau”), PhD students

Contents:

- Focus of the course:
studies in advanced continuum mechanics for energy-based material laws
- Description of material behavior via energy densities
- Mathematical concepts for studying energy densities
- Application to the example of phase transforming materials
(e.g. shape memory alloys, TRIP steels)

Lecturer:

Priv.-Doz. Dr.-Ing. Rainer Fechte-Heinen (rainer.fechte-heinen@rub.de),
Head of Research and Development, Heavy Plate Unit, thyssenkrupp Steel

Registration:

e-learning.rub.de → course ID: 127510-ws16 (to be activated)