Technisches Wahlfach / Optional Course WS 2011/2012

NUMERICAL SIMULATION OF FRACTURE

starting Tuesday, 11th of October, 14:30 am, Seminar room IA 1/21

(Lecture + Exercises, 4SWS)

Dr. Steffen Brinckmann, ICAMS

In this course students will acquire an understanding of material failure (fracture) of materials. Continuum mechanical models and considerations are used to better understand fracture and failure of materials. In an extended practical part, students will learn how to independently solve such physical applications.

Contents:

- Introduction into Abaqus
- Plasticity
- Historical Fracture Mechanics
- Fracture on the atomic scale.
- Computational Fracture Mechanics

A basic knowledge of a computer language, solid state physics, and continuum mechanics is advantageous, but not required. The (2+2) SWS course will be given in English.

Time: Lecture: Tuesdays, 14:30 – 16:00 am, Fridays, 8:30 - 10.00 am
Venue: changing (contact by email for details)

For further information contact Steffen.Brinckmann@rub.de

gez. S. Brinckmann