**Modulnr.** 223

**Titel** Financial Engineering

**Verwendbarkeit** Basis for all business administration based studies

**Modultyp** Compulsory

**Lehrsprache** English

**Lehrform** Seminar

**Angebotsfrequenz** Weekly

**Semester** 6th Semester

**SWS** 4

**ECTS-Credits** 5

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<th>Workload</th>
<th>50 / 40 / 40 / 20</th>
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**Korrespondierende Veranstaltungen** None

**Erforderliche Vorkenntnisse** None

**Leistungsnachweis** STA

**Zugelassenen Hilfsmittel** None

**Fachverantwortung** Prof. Dr. Günter Dierolf

**DozentInnen:** Prof. Dr. Dr. Joachim Häcker

**Motivation / Objectives** Students are supposed to understand the basic issues in Financial Engineering. Should the students be interested in passing the EUREX trader's exam they might find themselves being well prepared for doing so.

**Content** Mathematical aspects of Financial Engineering; Statistical aspects of Financial Engineering; Methodological Foundations of Financial Engineering; Derivatives in Financial Engineering; Historical Development of derivatives exchanges; The creation of EUREX; Derivatives markets world-wide; Derivatives and its structure; Listed Derivatives versus OTC; Clearing; Options—Basic issues; Options and its Settlement; Pricing of Options; Black-Scholes-Formula and Binomial models; Volatility; Greeks; Strategies with Options; Hedging.

**Literatur:**
- Bloss, Michael; Ernst, Dietmar; Häcker, Joachim; Sörensen, Daniel: Financial Engineering, München 2011 (The English Version should be used— a German version of the book is also available).