Computer Aided Capital Market Research

Modul	Computer Aided Capital Market Research		
Modulcode	FIN60160-		
Modulkoordinator	Stotz, Olaf		
Letzte Aktualisierung	11.12.2015		
Zielgruppe	Studiengang		Bachelor of Science
	Studienabschnitt		6. Semester
	Pflicht-/Wahlpflichtmodul		Wahl
	Moduldauer		1 Semester
	Credits:		6
	Häufigkeit des Angebots		Jährlich
	Sprache		Deutsch
Workload: 150 h	Präsenz: 44 h	Selbststudium: 22 h	Aufgaben: 84 h
Voraussetzungen für die Teilnahme	Good knowledge of Statistics, Mathematics and Finance.		
Verwendbarkeit für andere Module und Programme	Asset Management in the Bachelor programme and in the Master of Science programme.		

Qualifikationsziele / Lernergebnisse	**Knowledge:** On successful completion of this module, students will have a deep understanding of how capital market prices can be explained with capital market models. Students will thereby get an overview about major concepts, approaches and techniques in empirical and theoretical capital market research. They can • explain major capital market models • implement those models empirically with the help of MATLAB • test the validity of models **Skills:** On successful completion of this module students will have the proven ability to apply theoretical knowledge to empirical data. They can • analyse empirical asset prices • explain how asset prices are determined in real capital markets • identify the quality of empirical capital market data and handle large data sets • implement their knowledge on the basis of the computer language MATLAB. **Competence**: On successful completion of this module, students are able to transfer their knowledge to typical working situations in Finance and they can also transfer their knowledge to other field (I.e. working with large data sets). They also are able to • organize and structure complex problems in teams • transfer theoretical and empirical concepts of capital market analysis into practical approaches with the help of analytical software.
Modulstruktur	Lecture, programming, presentation of software codes and empirical results
Kurzbeschreibung des Moduls / Lerninhalte	Each session of the lecture consist of two parts. In the first part, certain capital market topics (see below) will be discussed theoretically and various papers will be discussed what researchers have found when they analyzed capital markets empirically. In the second part, students have to apply these topics directly to capital market data sets. During this part students should implement the ideas learned in the first part of the lecture. The implementation is conducted with the help of MATLAB. Thereby, students also learn how to handle large data sets of capital market data. At the end of the term students will present a seminar paper that addresses a special topic of capital market research. This seminar consists of a written seminar paper, a software code (which analyses a particular data set) and a presentation. Main topics (can vary from year to year): • Introduction into MATLAB and Databases • Efficiency of capital markets • Predictability of asset returns • Multifactor asset pricing models • Event studies • Present value relations • Term structure models • Volatility forecasting • Further topics.

Lernformen, Methodik und Betreuung	Lecture, in-class programming, presentation and term paper			
Art der Prüfungsleistungen im Modul und Akkumulationspunkte	Type of examination	Duration or length	Performance points	Due date or date of exam
	Term paper, software code and presentation	45 – 60 min	120	End of semester
Literaturhinweise	To be announced			