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# wir875 - Forecasting Methods

<b>Module label</b>	Forecasting Methods
<b>Modulkürzel</b>	wir875
<b>Credit points</b>	6.0 KP
<b>Workload</b>	180 h
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"><li>• Master Applied Economics and Data Science (Master) &gt;</li><li>• Master's programme Business Administration: Management and Law (Master) &gt;</li><li>• Master's Programme Business Informatics (Master) &gt;</li><li>• Master's Programme Computing Science (Master) &gt;</li><li>• Stecking, Ralf Werner (module responsibility)</li><li>• Lehrenden, Die im Modul (Prüfungsberechtigt)</li></ul>
<b>Zuständige Personen</b>	
<b>Prerequisites</b>	
<b>Skills to be acquired in this module</b>	With successful completion of the course, students shall: <ul style="list-style-type: none"><li>• be aware of and be able to evaluate quantitative forecasting methods.</li><li>• be able to select adequate methods in relevant fields of application, like time series and classification analysis.</li><li>• be able to run computer-aided analyses and to interpret the results properly.</li></ul>
<b>Module contents</b>	Various aspects of quantitative forecasting methods such as: <ul style="list-style-type: none"><li>• Time series components,</li><li>• Trend and seasonal methods,</li><li>• Stationarity,</li><li>• Multivariate forecasting methods,</li><li>• Autoregressive and moving average processes,</li><li>• Box-Jenkins method.</li></ul>
<b>Literatureempfehlungen</b>	Abraham, B. und Ledolter, J. (2005): Statistical Methods for Forecasting, New York  Hamilton, J.D. (1994): Time series analysis, Princeton NJ  Kohler, U. und Kreuter, F. (2008): Datenanalyse mit Stata : allgemeine Konzepte der Datenanalyse und ihre praktische Anwendung, 3. Aufl., München  Kreiß, J.-P. und Neuhaus, G. (2006): Einführung in die Zeitreihenanalyse, Berlin  Makridakis, S., Wheelwright, S.C., MacGee, V.E. (1983): Forecasting : methods and applications, New York  Neusser, K. (2011): Zeitreihenanalyse in den Wirtschaftswissenschaften, 3. Aufl., Wiesbaden  Schira, J. (2016): Statistische Methoden der VWL und BWL, 5. Aufl., München  Schlittgen, R. und Streitberg, B.H.J. (2001): Zeitreihenanalyse, München  Schlittgen, R. (2001): Angewandte Zeitreihenanalyse, München  Thome, H. (2005): Zeitreihenanalyse, München
<b>Links</b>	
<b>Language of instruction</b>	English
<b>Duration (semesters)</b>	1 Semester
<b>Module frequency</b>	halbjährlich
<b>Module capacity</b>	unlimited

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Type of module		je nach Studiengang Pflicht oder Wahlpflicht	
Module level		---	
Examination	Prüfungszeiten	Type of examination	
Final exam of module	end of semester	written exam or oral exam or term paper or seminar paper and presentation	
Form of instruction	Comment	SWS	Frequency
		Workload of compulsory attendance	
Lecture		2	28
Exercises		2	28
<b>Präsenzzeit Modul insgesamt</b>			<b>56 h</b>