



## Courses taught in English at the Faculty of Economic Sciences

<b>Module No.: M.WIWI-QMW.0002</b>	<b>Credits:</b>
<b>Title: Advanced Statistical Inference (Likelihood &amp; Bayes)</b>	6 C
<b>Course Content:</b>  The likelihood function and likelihood principles, maximum likelihood estimates and their properties, likelihood-based tests and confidence intervals (derived from Wald, score, and likelihood ratio statistics), expectation maximization algorithm, Bootstrap procedures (estimates for the standard deviation, the bias and confidence intervals), Bayes theorem, Bayes estimates, Bayesian credible intervals, prior choices, computational approaches for Bayesian inference.	<b>Course Type:</b>  Lecture (2 WLH) +Tutorial (2 WLH)

<b>Recommended Prerequisites:</b>  None	<b>Exam:</b>  Written examination (90 minutes)
<b>Recommended Semester:</b>  1 - 2	<b>Cycle:</b>  every year
<b>Literature:</b>  tba	<b>Lecturer:</b>  Prof. Dr. Thomas Kneib