

Georg-August-Universität Göttingen Module M.WIWI-VWL.0189: Natural Language Processing (NLP) in Macroeconomics		6 C 2 WLH
Learning outcome, core skills: After successful completion of the course, students have achieved the following competencies: <ul style="list-style-type: none"> • understand basic natural language processing (NLP) questions and techniques and their application to transform textual data into time-series data, • understand complex econometric models used in the literature and explain how NLP is combined with these models to answer specific research questions, • communicate knowledge of these econometric models and the application of NLP within these models in writing and orally, • participate actively in discussions with qualified contributions and comment on the contents of the other presentations. 		Workload: Attendance time: 28 h Self-study time: 152 h
Course: Natural Language Processing (NLP) in Macroeconomics (Seminar) <i>Contents:</i> Students revise the literature on natural language processing (NLP) with applications to macroeconomics. In the literature, NLP is used to analyse text data from various sources such as news media (e.g. online newspapers), social media (e.g. Twitter messages) or central bank and government press releases. An example of an application in literature would be the text analysis of newspapers. Here NLP is used to determine the content of each newspaper article over a period of several years and to create a news index from it. This news index is in turn integrated into a nowcasting model for improved forecasting of national GDP growth.		2 WLH
Examination: Term paper (max. 15 pages) with presentation (approx. 20 minutes) ! Natural Language Processing (NLP) in Macroeconomics Examination requirements: Regular attendance. Active in discussions.		6 C
Examination requirements: The students should be able to elaborate on a recent topic independently. The process involves literature research, scientific work, and writing, and the appropriate oral presentation of the written paper.		
Admission requirements: none	Recommended previous knowledge: none	
Language: English	Person responsible for module: Prof. Dr. Tino Berger	
Course frequency: irregular	Duration: 1 semester[s]	
Number of repeat examinations permitted:	Recommended semester:	

twice	2 - 4
Maximum number of students: 15	