

Supplementary certificate "DigiLab" for study programs at the Faculty of Economics and Business Administration¹

(Effective August 8, 2022)

Goals and procedures

- Students should be introduced to teaching content closely related to digitization to a greater extent. For
 working in a digitized job world, an improved and intensive training in method-based and application-oriented software courses is essential.
- After the successful completion of necessary courses, a supplementary certificate is issued to students.
 Those existing and new courses are closely related to digitization. The supplementary certificate certifies an up-to-date and attractive additional qualification that may serve as a unique selling point for graduates from the Friedrich Schiller University in Jena.
- For a course to be creditable as a DigiLab course, it has to fulfill the following requirements:
 - o Intensive use of a modern software system as used in research and/or practice
 - o Self-contained use of the software system by students (not just presentation in class), e.g. execution of data analysis, programming, scientific modelling or processing of case studies.
- The students can earn DigiLab-Points depending on the extent that the software system is implemented and used in the corresponding course. The DigiLab-Points make up a fraction of the actual ECTS-points of that course. A corresponding list of courses and DigiLab-Points is updated annually and published on the website of the DigiLab (see attachment).

Accomplishments to be made for the supplementary certificate "DigiLab"

- There are four different levels of the DigiLab certificate:
 - o **"Basic":** The student has to earn at least 21 DigiLab points from corresponding courses.
 - o "Intermediate": At least 27 DigiLab points from corresponding courses.²
 - "Advanced": At least 36 DigiLab points from corresponding courses.
 - "Expert": At least 45 DigiLab points from corresponding courses as well as a final thesis that fulfills the requirements that also apply to courses above.

¹ This document is an English translation of "Zusatz-Zertifikat "DigiLab" für die Studiengänge der Wirtschaftswissenschaftlichen Fakultät". The German version of this document is binding.

² The levels "Intermediate" and "Advanced" are additionally identified as "Intermediate Plus" and "Advanced Plus" respectively, if a final thesis that is applicable to the DigiLab criteria is provided.

³ If the final thesis does not comply with the DigiLab criteria, the level "Expert" can be reached by completing additional courses to the extent of 20 DigiLab-Points (in sum 65 DigiLab-Points).



- DigiLab points are assigned after the successful completion of a DigiLab course (grade 4.0 or better). The grade can be related if applicable either to the DigiLab part of a course or to the final grade. The regulation has to be announced at the beginning of the course in question.
- At the request of the student, evidence of successfully completed DigiLab courses as well as the highest DigiLab level reached will be provided. The examination committee (Prüfungsausschuss) is responsible for the procedure of providing evidence. In case a certificate proving a lower level is to be replaced by a certificate of a higher level, this is to be requested by the student.
- An official document listing the highest achieved level that is signed by the faculty's dean as well as a separate list of successfully completed DigiLab courses (including grades and average grade) can be handed out at request.
- The average grade is determined as the mean over all grades weighted by the number of DigiLab-Points. Therein, only the best grades necessary for achieving the highest DigiLab level are taken into account.
- If the student requests that (parts of) courses, seminars and/or final thesis should be creditable within
 the DigiLab, he/she has to make a substantiated request to the examination committee (Prüfungsausschuss). This request has to be supported by the assessment of the module supervisor regarding the way
 and extent of creditable achievements in terms of DigiLab-Points. In case of final theses, the assessment
 should be part of the thesis report.



Attachment: Course list of creditable DigiLab courses in English (Effective August 8, 2022)⁴

Module code and title	Module supervisor	Type of course and test performance	Winter/ summer term	Creditable DigiLab- Points
MW20.7 Research Seminar: Patent Data and Social Network Analysis ⁵	PD Dr. Holger Graf	Research seminar requiring software-based analyses of empirical data	Summer	6
MW21.8 Empirical Macroeconomics	Prof. Dr. Maik Wolters	The course enables students to conduct their own applied empirical analyses and sets the basis to study more advanced econometric methods on their own. Applications include the classical linear regression model, nonspherical errors, IV estimation, and univariate and multivariate time series econometrics	Summer	3
MW21.9 Computational Macroeconomics	Prof. Dr. Maik Wolters	Autonomously conducted research project in the field of computational macroeconomics. Applications include vector autoregressions, stochastic and deterministic simulations of macroeconomic models, estimation of macroeconomic models, forecasting with macroeconomic models	Winter	6
MW23.2 Advanced Public Economics II: Education Economics	Prof. Dr. Silke Übelmesser	Lectures, tutorials and applied empirical analyses with statistics software (Stata), including a software introduction, several exercises, and replication of parts of a publication	Summer	3
MW23.3 Advanced Public Economics IV: Special Topics	Prof. Dr. Silke Übelmesser	Lectures, tutorials and applied empirical analyses with statistics software (Stata), including a software introduction, several exercises, and replication of parts of a publication	Summer	3
MW24.1 Empirical Methods	Prof. Dr. Oliver Kirchkamp	Students should understand how economic hypotheses are developed and how they are tested. They should learn to assess and to compare different methods to test economic hypotheses	Winter	4
MW24.4 Seminar Quantitative Economics ⁶	Prof. Dr. Oliver Kirchkamp	Topics from empirical, experimental and quantitative economics	Summer	0 - 6
MW25.4 IPE III: Guided Reading in International Eco- nomics	Prof. Dr. Andreas Freytag	Mutual replication of an empirical study with statistics software (Stata)	Winter	3 (starting term 20/21)
MW26.2 Financial Intermediation and the Real Economy	Prof. Dr. Daniel Streitz	In this course students replicate empirical studies in the area of banking using the statistical software R. Applications include linear regression models, difference in differences, and IV estimation.	SoSe	3
MW26.7 Topics in Economics - Topics in Empirical Banking	JProf. Huyen Ngoc Phuong Nguyen	The course enables students to conduct their own applied empirical analyses in banking using STATA. Applications include the classical linear regression model, event study, difference in differences, and IV estimation.	Winter	4
MW26.5 General Key Qualifications ⁷		Explicitly for DigiLab designated projects with e.g. self-conducted programming, data analysis, optimization by means of software. e.g.	Summer / Winter	1 - 6

⁴ This list only contains courses held in English. The German version of this document also lists the German courses.

⁵ As part of the module MW20.7, multiple seminars are provided. Only seminars that are explicitly creditable for DigiLab-Points can be accounted for the DigiLab level.

⁶ The module supervisor will inform in a timely manner whether and to which extent the seminar will be creditable for DigiLab-Points, see also https://www.kirchkamp.de/mw244.

⁷ As part of the module MW26.5 "General Key Qualifications", only explicitly for DigiLab designated projects are creditable for DigiLab-Points.



Module code and title	Module supervisor	Type of course and test performance	Winter/ summer term	Creditable DigiLab- Points
		-Introduction to R, autonomous processing of analyses with R (PD Dr. Holger Graf), 6 DP -Self-conducted applied empirical analyses (Prof. Dr. Silke Übelmesser), 6 DP		
Creditable seminars		Seminars with e.g. self-conducted programming, data analysis, optimization by means of software	Summer / Winter	1 – 6

Note: If creditable DigiLab-Points are listed as a range of points, the course achievement can be extend by additional tasks, cases and/or projects voluntarily. In case of a seminar, the creditable DigiLab-Points can vary each semester depending on the topic and/or applied methods. The module supervisor decides upon the exact number of creditable DigiLab-Points.

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