

Course Name	Harmonic Analysis
Contents and Objectives	<p><u>Content:</u></p> <ul style="list-style-type: none"> • Fourier series and Fourier transformation • Harmonic functions and integral kernels • Singular integrals • Hardy spaces • Littlewood–Paley theory • Interpolation theory <p>Objectives: Participants are able to use methods from harmonic analysis to solve differential equations. They will be capable of applying techniques from this lecture in the context of function spaces and in the field of approximation theory.</p>
Teaching	<p>This course consists of lectures and exercise classes.</p> <ul style="list-style-type: none"> • Lecture: Harmonic Analysis (4h/week) • Exercise class: Harmonic Analysis (2h/week) <p>This class can be taught remotely.</p>
Prerequisites	
Verwendbarkeit des Moduls	-
Examination	Oral exam (30 minutes)
Credits	8 ECTS points
Frequency	This course is given at least every second year.
Workload	The estimated total working time for this course is 240 hours.
Duration	This course is given during one semester.