

Course Name	Graph Theory
Contents and Objectives	<p><u>Content:</u></p> <ul style="list-style-type: none"> • basic terminology: graph, tree, connectivity, chromatic number, distance, isomorphism, minor • connectivity properties and results • graph factors • graph coloring • planarity <p><u>Objectives of the course:</u> Getting acquainted with basic concepts, notions and proof techniques in graph theory including some fundamental algorithmic approaches should enable to employ these techniques fruitfully for setting up appropriate models in other contexts so that these allow for rigorous mathematical treatment and the development of efficient algorithmic approaches.</p>
Teaching	<p>This course consists of lectures and exercise sessions.</p> <ul style="list-style-type: none"> • Lectures: Graph Theory (4h/week) • Exercises: Graph Theory (2h/week) <p>This class can be taught remotely.</p>
Prerequisites	Basic proof techniques
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.