### Module title

Stochastical Processes

### Abbreviation

10-M=ASTPin-152-m01

### Module coordinator

Dean of Studies Mathematik (Mathematics)

### Module offered by

Institute of Mathematics

### ECTS

10

### Method of grading

Numerical grade

### Only after succ. compl. of module(s)

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### Duration

1 semester

### Module level

Graduate

### Other prerequisites

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### Contents

Markov chains, queues, stochastic processes in $C[0,1]$, Brownian motion, Donsker's theorem, projective limits.

### Intended learning outcomes

The student is acquainted with the fundamental notions and methods of stochastical processes and can apply them to practical problems.

### Courses

(type, number of weekly contact hours, language — if other than German)

V (4) + Ü (2)

Module taught in: English

### Method of assessment

(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate)

Assessment offered: In the semester in which the course is offered and in the subsequent semester

Language of assessment: English

creditable for bonus

### Allocation of places

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### Additional information

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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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### Module appears in

Master's degree (1 major) Mathematics International (2015)

Master's degree (1 major) Mathematics International (2021)