

School of Mathematics and Natural Science in Wuppertal University

2025/2026 冬学期 開講講義 (予想)

なお、分野の分類は目安であり、興味のある講義はどの分類でも履修できる。

詳細:

<https://www.uni-wuppertal.de/en/international/international-students/application-and-admission/study-without-a-degree/english-courses>

ただし、どこまで最新の情報が不明な点がある。最終的には現地で確認および先生へ直接お願い。

Mathematics (数学)

Numerical Linear Algebra (数値線形代数) (lecture) 6 credits

Numerical Linear Algebra (数値線形代数) (exercise)

Numerical Analysis and Simulation 1 (数値解析およびシミュレーション 1) (lecture) 8 credits

Numerical Analysis and Simulation I (Exercise)

Advanced Numerics (発展数値解析) (lecture) 8 credits

Advanced Numerics (発展数値解析) (exercise)

Modern programming (現代プログラミング) (lecture) 6 credits

Modern programming (現代プログラミング) (exercise) 6 credits

Computational Finance II 8 credits

Exercises for Computational Finance II

Physics (物理)

Advanced quantum mechanics (発展 量子力学) 8 credits

Introduction to atmospheric physics (初歩 大気物理)

Selected Topics in Atmospheric Physics and Seminar on Atmospheric Physics (特論 大気物理)
(lecture) 4 credits

Selected Topics in Atmospheric Physics and Seminar on Atmospheric Physics (特論 大気物理)
(exercise) 4 credits

Selected Topics in Atmospheric Physics and Seminar on Atmospheric Physics (特論 大気物理)
(seminar) 4 credits

Fundamentals of elementary particle physics and particle astrophysics (基礎 素粒子物理&素粒子宇宙学)
(lecture) 8 credits

Fundamentals of elementary particle physics and particle astrophysics (基礎 素粒子物理&素粒子宇宙学)
(exercise)

Detectors and Methods in Particle and Astroparticle Physics (実験法 素粒子物理) (lecture) 8 credits

Exercise detectors and Methods in Particle and Astroparticle Physics (実験法 素粒子物理) (exercise)

Many particle theory (lecture) 8 credits

Many particle theory (exercise)

Superconductivity (lecture)

Computational Materials Science (lecture) 8 credits

Chemistry (化学)

Theoretical Chemistry Applications 8 credits

Organic supramolecular chemistry (有機超分子化学)

BSc Sustainable Chemistry

- English for Scientists
 - English for Chemistry Students (Seminar/Exercise)
- Mathematics
 - Mathematics exercise for chemists (lecture)
 - Mathematics exercise for chemists (Exercise)
- Basics of Chemistry
 - Basics of Chemistry – Lecture
 - Basics of Chemistry – Exercise
 - Introduction to Physical Chemistry – Lecture
 - Fundamentals of Chemistry (SCBC) – Practical (Physical Chemistry Part)
 - Fundamentals of Chemistry (SCBC) – Practical (Inorganic Chemistry Part)
 - Basics of Chemistry (Seminar)
- Introduction to Computer Science
 - Introduction to Computer Science
 - Using MS Office and VBA
- Toxicology
 - Lecture - Biology / Biochemistry
 - Lecture - Fundamentals of Toxicology
 - Seminar – Toxicology
- Paths to sustainability in industry
 - Paths to sustainability in industry (seminar)

Information (情報)

Block Course on Mathematical Foundation (数学基礎) 2 credits

Introduction to high performance computing (初歩 高性能計算) 3 credits

Multiobjective Optimization 1 (多目的最適化1) 9 credits

Image processing and data visualization (画像処理とデータ描画) 演習

Image processing and data visualization (画像処理とデータ描画) 講義 4 credits

Imaging II: Image processing and data visualization + Seminar on Imaging II (イメージング：画像処理とデータ描画 + セミナー) 8 credits

Seminar on Imaging II

- Introduction to computer simulation (Exercise) (初歩 コンピューターシミュレーション 演習) 2 credits
- Introduction to computer simulation 1 (Lecture) (初歩 コンピューターシミュレーション 1 講義) 5 credits
- Introduction to computer simulation II (Lecture) (初歩 コンピューターシミュレーション II 講義) 4 credits
- Lab Course 1 (Practice exercise) (研究室コース 1 実地演習?) 2 credits
- Lab Course 2 (Practice exercise) (研究室コース 2 実地演習?) 8 credits
- Visualization 1 (画像化 1) 3 credits
- Visualization 2 (画像化 2) 4 credits