

AT programme 2022-2023

Colour key



Category (year 1 only) / subject

- A / Mathematics
- B / Core courses
- C / Lab courses + Instrumentation
- D / Projects
- E / Organic Chemistry + Quantum Mechanics

| M1: Mechanics 202000610 H Becht | M2: Thermodynamics 202000614 A Onnink | M3: Fundamentals of 202000618 GJ Koster | M4: Dynamics 202000622 A Onnink |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Calculus 1 * (202001212) (4.0 EC) | Calculus 2 * (202200179) (4.0 EC) | Vector Calculus * (202200189) (2.0 EC) | Linear Algebra * (202001208) (3.0 EC) |
| Mechanics * (202000611) (4.5 EC) | Thermodynamics * (202200185) (4.0 EC) | Structure and Properties of Materials * (202200185) (4.0 EC) | Dynamical Systems * (202000623) (4.0 EC) |
| Lab Practice and Programming Skills 1 (202000612) (3.5 EC) | Lab Practice and Programming Skills 2 (202200186) (3.0 EC) | Quantum Matter * (202000620) (3.0 EC) | Basic Electronics and Instrumentation * (202000624) (4.0 EC) |
| Project Mechanics (202000613) (3.0 EC) | Project Thermodynamics (202000617) (4.0 EC) | Organic Chemistry * (202000621) (3.0 EC) | Project Accelerometer * (202000625) (4.0 EC) |
| M5: Signals, Models & 202000690 A Onnink | M6: Elective module** | M7: Fields & Waves 202000651 W van den Beld | M8: Business & Society 202000655 E de Weerd-Nederhof |
| Signals * (202000627) (4.0 EC) | Materials Science and Engineering | Finite Element Methods * (202000652) (3.0 EC) | Entrepreneurship & Innovation Management * (202000656) (6.0 EC) |
| Models * (202000628) (4.0 EC) | Transport Phenomena | Electro- and Magnetostatics * (202000653) (9.0 EC) | Data, Statistics & Probability for Engineers * (202000657) (5.0 EC) |
| Elective * (4.0 EC): - Engineering Solid Mechanics (202000695) - Programming in Engineering (202000630) - Classical Mechanics (202000694) - Electronics (202000644) | Systems and Control | Project Antenna * (202000654) (3.0 EC) | Socio-technical Futures * (202000658) (4.0 EC) |
| Project SMS * (202000693) (3.0 EC) | Software Systems | | |

| M9: Master Preparation |
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| <p>Choice: Check master admission requirements on AT webpage</p> <p>Offered by the AT Programme: Condensed Matter Physics for AT (202000659)</p> |

| M10: Master Preparation |
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| <p>Choice: Check master admission requirements on AT webpage</p> |

| M11: Master |
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| <p>Choice: Check master admission requirements on AT webpage</p> <p>Offered by the AT programme: Micro System Design & Realization (202000664)</p> |
| <p>Preparation Bachelor Assignment (202000668) (4.0 EC)</p> |

| M12: BSc Assignment |
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| <p>Scientific/Design</p> |
| <p>Communication</p> |
| <p>Work process</p> |

* Open to students from other educational programmes.

** Detailed information can be found on the next page.

| M6a: Materials Science 202000633 M Huijben |
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| <p>Advanced Materials * (202000634) (3.5 EC)</p> |
| <p>Fundamentals of Solids * (202000635) (3.5 EC)</p> |
| <p>Chemistry and Technology of Materials * (202000636) (4.0 EC)</p> |
| <p>Elective * (4.0 EC): - Semiconductor Devices (202000637) - Physical Chemistry of Interfaces (202000638)</p> |

| M6b: Physical Transport 202000736 W Brilman |
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| <p>Physical Transport Phenomena (202000737) (7.5 EC)</p> |
| <p>Numerical Methods (202000739) (3.5 EC)</p> |
| <p>Project Transport Phenomena (202000738) (4.0 EC)</p> |

This module is coordinated by the Chemical Science and Engineering programme.

| M6c: Systems and 202001139 G Krijnen |
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| <p>Engineering System Dynamics (202001141) (5.0 EC)</p> |
| <p>Control Engineering (202001140) (5.0 EC)</p> |
| <p>Project Systems and Control (202001142) (5.0 EC)</p> |

This module is coordinated by the Electrical Engineering programme.

| M6d: Software Systems 20201023 T van Dijk |
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| <p>Software Systems Core (20201024) (12 EC)</p> |
| <p>Introduction to Mathematical Analysis (201400385) (3.0 EC)</p> |

This module is coordinated by the Technical Computer Science programme.