Model timetable: Particle Physics Instrumentation – 120 cr

Start of studies in the autumn 2025, 2027 or 2029:

First year:

period 1, odd year (17,5 cr)

Obligatory:	PAP332 Introduction to particle physics I (5 cr)
Advanced studies:	PAP328 Laboratory course on instrumentation (5 cr) PAP338 Gaseous radiation detectors and scintillators (5 cr) PAP334 Statistical methods (5 cr) TCM304 Mathematical Methods of Physics IIIa (5 cr)
Other studies:	-

period 2, odd year (17,5 cr)

Obligatory:	PAP325 Introduction to Particle Physics II (5 cr)
Advanced studies:	PAP328 Laboratory course on instrumentation (continues) PAP338 Gaseous radiation detectors and scintillators (continues) PAP334 Statistical methods (continues) DATA11002 Introduction to machine learning (5 cr)
Other studies:	-

period 3, even year (15 cr)

Obligatory:	-
Advanced studies:	PAP339 Semiconductor radiation detectors (5 cr) MATR386 Physics of positrons in solids and defects (5 cr) (even years) PAP327 Particle physics phenomenology (5 cr) PAP331 Computing methods in high energy physics (5 cr) MATR310 Laboratory exercises (10 cr)
Other studies:	**-**

period 4, even year (15 cr)

Obligatory:	-
Advanced studies:	PAP339 Semiconductor radiation detectors (continues) MATR386 Physics of positrons in solids and defects (continues) PAP327 Particle physics phenomenology (continues) PAP331 Computing methods in high energy physics (continues) MATR310 Laboratory exercises (continues)

Other studies: -

Second year

period 1, even year (18,75 cr)

Obligatory: PAP301 ParAs Seminar Course (5cr)
PAP350 MSc thesis work (30 cr)

Advanced studies: TCM327 Quantum Field Theory I (5 cr)
TCM304 Mathematical methods of physics IIIa (5 cr)

Other studies: -

period 2, even year year (13,75 cr)

Obligatory: PAP301 ParAs Seminar Course (continues)
PAP350 MSc thesis work (continues)

Advanced studies: DATA11002 Introduction to machine learning (5 cr)

Other studies: -

period 3, odd year (13,75 cr)

Obligatory: PAP301 ParAs Seminar Course (continues)
PAP350 MSc thesis work (continues)

Advanced studies: PAP329 Particle physics experiments (5 cr)
PAP340 Physics of semiconductor devices (5 cr)

Other studies: -

period 4, odd year (13,75 cr)

Obligatory: PAP301 ParAs Seminar Course (continues)
PAP350 MSc thesis work (continues)

Advanced studies: PAP329 Particle physics experiments (continues)
PAP340 Physics of semiconductor devices (continues)

Other studies: -

Start of studies in the autumn 2026 or 2028:

First year:

period 1, even year (15 cr)

Obligatory:	PAP332 Introduction to particle physics I (5 cr)
Advanced studies:	PAP328 Laboratory course on instrumentation (5 cr) PAP334 Statistical methods (5 cr) TCM304 Mathematical methods of physics IIIa (5 cr)
Other studies:	-

period 2, even year (15 cr)

Obligatory:	PAP325 Introduction to particle physics II (5 cr)
Advanced studies:	PAP328 Laboratory course on instrumentation (continues) PAP334 Statistical methods (continues) DATA11002 Introduction to machine learning (5 cr)
Other studies:	-

period 3, odd year (15 cr)

Obligatory:	-
Advanced studies:	PAP331 Computing methods in high energy physics (5 cr) PAP329 Particle physics experiments (5 cr) PAP340 Physics of semiconductor devices (5 cr) MATR310 Laboratory exercises (10 cr)
Other studies:	BSCS2015 Data Analysis with Python (5 cr, MOOC)

period 4, odd year (15 cr)

Obligatory:	-
Advanced studies:	PAP331 Computing methods in high energy physics (continues) PAP329 Particle physics experiments (continues) PAP340 Physics of semiconductor devices (continues) MATR310 Laboratory exercises (continues)
Other studies:	BSCS2015 Data Analysis with Python (continues)

Second year

period 1, odd year (16,25 cr)

Obligatory:	PAP301 Seminar in particle physics and astrophysical sciences (5 cr) PAP350 MSc thesis work (30 cr)
Advanced studies:	PAP338 Gaseous radiation detectors and scintillators (5 cr) TCM328 Quantum Field Theory I (5 cr)
Other studies:	-

period 2, odd year (16,25 cr)

Obligatory:	PAP301 ParAs Seminar Course (continues) PAP350 MSc thesis work (continues)
Advanced studies:	PAP338 Gaseous radiation detectors and scintillators (continues) MATR316 Nuclear physics (5 cr)

period 3, even year (13,75 cr)

Obligatory:	PAP301 ParAs Seminar Course (continues) PAP350 MSc thesis work (continues)
Advanced studies:	PAP339 Semiconductor radiation detectors (5 cr) PAP327 Particle physics phenomenology (5 cr)
Other studies:	-

period 4, even year (13,75 cr)

Obligatory:	PAP301 ParAs Seminar Course (continues) PAP350 MSc thesis work (continues)
Advanced studies:	PAP339 Semiconductor radiation detectors (continues) PAP327 Particle physics phenomenology (continues)
Other studies:	-