

Model timetable: Experimental Particle Physics – 120 cr

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

First year:

period 1, odd year (15 cr)

Obligatory:	PAP332 Introduction to Particle Physics I (5 cr)
Advanced studies:	PAP328 Laboratory course on instrumentation (2,5 cr) PAP338 Gaseous radiation detectors and scintillators (2,5 cr)
Other studies:	FYS2081 Cosmology I (5 cr)

period 2, odd year (15 cr)

Obligatory:	PAP332 Introduction to Particle Physics II (5 cr)
Advanced studies:	PAP328 Laboratory course on instrumentation (2,5 cr) PAP338 Gaseous radiation detectors and scintillators (2,5 cr) DATA11002 Introduction to Machine Learning (5 cr)

period 3, even year (12,5 cr)

Obligatory:	-
Advanced studies:	PAP339 Semiconductor radiation detectors (2,5 cr) PAP327 Particle Physics Phenomenology (2,5 cr) PAP331 Computing Methods in High Energy Physics (2,5 cr) TCM302 Quantum Mechanics IIa (5 cr)

period 4, even year (17,5 cr)

Obligatory:	-
Advanced studies:	PAP339 Semiconductor radiation detectors (2,5 cr) PAP327 Particle Physics Phenomenology (2,5 cr) TCM303 Quantum Mechanics IIb (5 cr) PAP331 Computing Methods in High Energy Physics (2,5 cr) DATA12001 Advanced Course in Machine Learning (5 cr)

Second year

period 1, even year (16,25 cr)

Obligatory:	PAP301 ParAs Seminar Course (1,25cr) PAP350 MSc thesis work (7,5 cr)
Advanced studies:	TCM327 Quantum Field Theory I (5 cr) PAP334 Statistical methods (2,5 cr)

period 2, even year (16,25 cr)

Obligatory: PAP301 ParAs Seminar Course (1,25cr)
PAP350 MSc thesis work (7,5 cr)

Advanced studies: TCM328 Quantum Field Theory II (5 cr)
PAP334 Statistical methods (2,5 cr)

period 3, odd year (16,25 cr)

Obligatory: PAP301 ParAs Seminar Course (1,25cr)
PAP350 MSc thesis work (7,5 cr)

Advanced studies: PAP327 Particle Physics Experiments (2,5 cr)
MATR323 Basics of Monte Carlo Simulations (5 cr)

period 4, odd year (11,25 cr)

Obligatory: PAP301 ParAs Seminar Course (1,25cr)
PAP350 MSc thesis work (7,5 cr)

Advanced studies: PAP327 Particle Physics Experiments (2,5 cr)

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 (2,5 cr)
PAP334 Statistical methods (2,5 cr)

Other studies: FYS2081 Cosmology I (5 cr)

period 2, even year (15 cr)

Obligatory: PAP332 Introduction to Particle Physics II (5 cr)

Advanced studies: PAP328 Laboratory course on instrumentation (2,5 cr)
PAP334 Statistical methods (2,5 cr)
DATA11002 Introduction to Machine Learning (5 cr)

period 3, odd year (15 cr)

Obligatory: -

Advanced studies: PAP331 Computing Methods in High Energy Physics (2,5 cr)
PAP329 Particle Physics Experiments (2,5 cr)
MATR323 Basics of Monte Carlo Simulations (5 cr)

TCM302 Quantum Mechanics IIa (5 cr)

period 4, odd year (15 cr)

Obligatory: -

Advanced studies: PAP331 Computing Methods in High Energy Physics (2,5 cr)
PAP329 Particle Physics Experiments (2,5 cr)
TCM303 Quantum Mechanics IIb (5 cr)
DATA12001 Advanced Course in Machine Learning (5 cr)

Second year

period 1, odd year (16,25 cr)

Obligatory: PAP301 ParAs Seminar Course (1,25cr)
PAP350 MSc thesis work (7,5 cr)

Advanced studies: TCM327 Quantum Field Theory I (5 cr)
PAP338 Gaseous radiation detectors and scintillators (2,5 cr)

period 2, odd year (16,25 cr)

Obligatory: PAP301 ParAs Seminar Course (1,25cr)
PAP350 MSc thesis work (7,5 cr)

Advanced studies: TCM328 Quantum Field Theory II (5 cr)
PAP338 Gaseous radiation detectors and scintillators (2,5 cr)

period 3, even year (13,75 cr)

Obligatory: PAP301 ParAs Seminar Course (1,25cr)
PAP350 MSc thesis work (7,5 cr)

Advanced studies: PAP329 Particle Physics Phenomenology (2,5 cr)
PAP339 Semiconductor radiation detectors (2,5 cr)

period 4, even year (13,75 cr)

Obligatory: PAP301 ParAs Seminar Course (1,25cr)
PAP350 MSc thesis work (7,5 cr)

Advanced studies: PAP327 Particle Physics Phenomenology (2,5 cr)
PAP339 Semiconductor radiation detectors (2,5 cr)