

PhD Study Programm

Particle Physics
18 CP (ECTS)

Data 9 CP (ECTS)

Technology 15 CP
(ECTS)

Particle Physics
Phenomenology
3 CP

Applied Statistics
3 CP

Particle
Accelerators
physics 4,5 CP

Quantum Field
Theory 6 CP

Applied
Computational
methods 3 CP

Particle Accelerators
technology and
applications 4.5 CP

Standard Model
6 CP

Big Data 3 CP

Particle
Detectors 3 CP

Beyond Standard
Model 3CP

Research
Internship (at
CERN?)

Radiation
Safety 3 CP

Student competences

Understanding of
Particle Physics
and Standard
Model

Knowledge for
further research
beyond known
at Standard
Model

Basic Skills to
Analyse and
Interpret PP
Experimental
Data

Has Overview at
PP tools –
Accelerators,
Detectors

Has Overview at
Accelerator and
Detector Design
and Major
Technologies

Has Insight at
Accelerator
Applications