



Support for Study Program creation from EU funding – SAM 8.2.1.

4th CBG meeting *10th October, Kaunas*

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Financial Support for new study program creation

- EU and Latvian government funding
- 100 000 EUR for one Study Program creation
- Dedicated funding to meet new Smart Specialization Strategy goals
- Special funding for Higher Education Institutions
- Activities must be performed until 30 November 2023.

PhD Study Program

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

216 – 288 KP

PhD work
144

Obligatory
subjects
23

Obligatory
choice subjects
37

Free choice
subjects
12

Obligatory subjects

23

Particle Accelerator technology and applications, experimental techniques

– 3

Experimental particle physics (for physicists or for Engineers) - 3

Scientific Publishing – 3

Conference Participation – 3

Pedagogical Work Theory and Practice - 3

Particle detectors – 4,5

Radiation safety – 3

Data mining for particle physics - 3

Obligatory choice subjects

37

Research Practice at other institution 15

Particle Physics Phenomenology 3 CP

Quantum Field Theory 6 CP

Standard Model 6 CP

Beyond Standard Model 3 CP

Applied Statistics 4,5 CP

Applied Computational methods 6 CP

Big Data 6 CP

Particle Accelerator physics 4,5 CP

Particle Accelerator technology and applications 4,5 CP

Particle Detectors 3 CP

Materials for Particle Physics 3 CP

Free choice subjects

12

Astroparticle
Physics 4,5
CP

Medical
Physics 9 CP

DAQ for
particle
physics
architecture
4,5 CP

Data maining
6 CP

Particle Beams
and Targets 3
CP

Particle
aceelerator
Physics II 3
CP

Cruogenics 3
CP

Cruogenics 3
CP

Particle
Detector
materials II 4,5
CP

Beam
Formation 3
CP

Accelerator
Power
Systems 3 CP

Accelerators
for Medical
Applications 6
CP

Particle
Detectors II 3
CP

Admission Criteria

- Masters degree: Physics; Engineering
- Additional exam for capable students from other fields (computing, chemistry e.t.c.)
- Publications
- Participation in scientific conferences
- Participation at scientific work (projects)
- Pedagogical work

Next steps

- Formal start of the creation of study program is foreseen for 2020
- Now the formalities for project execution are executed
- First meetings of expert groups: February – March 2020
- Further – creation of study program content
- First students: fall 2021.

Time scale

2019.				2020.				2021.				2022.							
1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.				
				x	x	x	x	Licensing				Aprobation				Accreditation			

Study Program Creation

- Program will be created by RTU and UL
- Program should be licensed in Latvia
- Program should be accredited

Budget

- **Salaries - 7 13 39,14**
- **Licensing – 4900**
- **Accreditation - 6300**
- **Travel – 10200**
- **Publicity – 3000**
- **Seminars, meetings – 1800**

Thank you