Physics at NTNU

Study programs:

BFY: BSc in Physics (3 years; ca 50 students enrolled each year)

MSPHYS: MSc in Physics (2 years; international program; ca 20 students)

MTFYMA: MSc in Applied Physics and Mathematics (5 years; ca 50 students major in physics)

MTNANO: MSc in Nanotechnology (5 years; ca 15 students major in physics)

MLREAL: MSc in Natural Science with Teacher Education (5 years; ca 10 students major in physics)

Example curriculum: MTFYMA, main profile Applied Physics

1st year
Examen philosophicum, Information Technology, Math 1, Mechanics,
Chemistry, Electricity and magnetism, Math 2, Math 3

2nd year
Thermal physics, Fluid mechanics, Math 4, Technology management,
Quantum physics, Statistics, Programming, Scientific computations

3rd year
Optics, Measurement techniques, Quantum mechanics, Classical mechanics,
Instrumentation, Solid state physics, Statistical mechanics, Electromagnetic theory

4th year
Experts in a Team
Elective courses

5th year
Specialization project
Master´s thesis

Research groups/areas

- SFF Center for Quantum Spintronics (QuSpin)
- SFF Porous Media Laboratory (PoreLab)
- Biological polymers and bionanotechnology
- Medical physics and technology
- Transmission electron microscopy (TEM)
- X-ray physics (RECX)
- Materials theory
- Optoelectronic materials
- Soft and complex matter
- Atmosphere physics
- Laser physics
- Astroparticle physics
- Computational physics
- University didactics