The Master’s programme in Medical Natural Sciences is a unique opportunity for students who want to combine scientific subjects with practical application. For example, you will be able to:

- Develop new possibilities and techniques for medical diagnosis and treatment
- Research ways of using laser technology to treat various diseases
- Work on clarifying the molecular basis of various diseases

Compulsory courses:
1. Biomedical Modelling and Simulation (period 1)
2. Advanced Image Processing (period 2)
3. Physics of Organs I or Pathophysiology of Heart and Circulation or Soft Condensed Matter and Biological Physics or Bio-analysis and clinical diagnostics

Academic core (compulsory):
- Ethics in Biomedical Research
- Scientific writing in English
Both courses are scheduled in period 3

Restricted choice courses:
- Physics of Organs II (6 EC)
- Dynamics of Biomolecules and Cells (6 EC)
- Parameter Estimation in Medical and Biological Sciences (6 EC)
- Elektronica & signaalverwerking (6 EC)
- Mass spectrometry (6 EC)
- Protein analysis (6 EC)
- High-throughput screening (6 EC)
- Proteomics in Biomedical Research (3 EC)
- Advanced Cardiac Diagnostics (3 EC)
- Life Cell Imaging (3 EC)
- Biomedical Optics (6 EC)
- Advanced Medical Technology (6 EC)
- Signal transduction in Health and Disease (6 EC)
- Drug induced stress and signaling (6 EC)

Research projects:
1. Major research project: choose subject from research (39 EC)
2. Minor research project: choose subject from research (21 EC)

Elective space: extension research projects or literature thesis; extra courses (12 EC)

More information: www.vu.nl/mns

Every part of the program, including the choice of optional courses, has to be discussed and agreed upon with the master coordinator and approved by the examination board.

Master coordinator: Dr. Theo Faes
Phone: +31 20 44 40178 E-mail: tjc.faes@vumc.nl