2.2.1 Degree programmes and requirements

SPMS offers graduate degrees by research leading to a Master of Science and Doctor of Philosophy. Research candidates work closely with their assigned supervisor.

Master of Science and Doctor of Philosophy programmes are offered in the following disciplines and some research areas are as follows:

Chemistry and Biological Chemistry

- Synthesis, Methodology and Catalysis
- Inorganic; Organic; Analytical Chemistry
- Bioinorganic; Biorganic; Biophysical Chemistry
- Physical; Theoretical; Computational Chemistry
- Medicinal Chemistry
- Green Chemistry
- Total Synthesis of Natural Products and Drugs

Mathematical Sciences

A broad range of areas in pure and applied mathematics as well as statistics, including

• Algebraic Geometry
• Algebraic Number Theory
• Bioinformatics and Biostatistics
• Coding Theory and Cryptography
• Computability Theory and Logic
• Numerical Analysis
• Optimisation
• Scientific Computing
• Statistics
• Topology

Physics and Applied Physics

- Biophysics; Bioimaging; Soft Condensed Matter
- Nano-Science and Nano-Technology; Surface and Interface Science
- Laser Physics; Quantum Electronics; Photonics
- Semiconductor Physics and Spin Electronics
- Quantum Information Science and Technology
- Theory and Computation
- Atmospheric Physics, Condensed Matter, Nonlinear and Complex Systems

Special Programmes

Accelerated B.Sc. (Hons) cum M.Sc. and a B.Sc. (Hons) cum Ph.D.

The undergraduate three to four year programme leads to a B.Sc. (Hons) degree. In addition, for the high achievers, it is possible to structure an accelerated B.Sc. (Hons) cum M.Sc., and a B.Sc. (Hons) cum Ph.D., depending on the nature of the dissertation topic. However, a good education is not all about acceleration. Talented students can choose to be immersed in research as early as in their first year of study, and along the way to prepare for dissertation work as partial fulfillment of the M.Sc. or Ph.D. degree.