4.2.2.8 Master of Science in Physics (Full-Time and Part-Time)

The Master of Science in Physics is a coursework programme initiated as a part-time programme in January 2000. It also can be enrolled on a full-time basis now.

Programme Objectives
- Advanced training in fundamental aspects of Physics
- Opportunities for Physics teachers and other professionals to further upgrade their professional skills and qualifications

Admission Requirements
- An honours degree in Physics from NUS or such other universities approved by NUS, or
- A Bachelor’s pass degree in Physics or related discipline, or completed three years of Physics study in a university, or other qualifications as NUS may approve.

Programme Structure

A candidate in the MSc Programme in Physics by coursework must complete the following in order to be awarded the MSc degree:

**Track 1**: 40 modular-credit programme (for applicants who have an Honours degree or equivalent qualifications)

EITHER
1. Read and pass **five** PC level 5000 modules (excluding PC5198) amounting to 20 MCs and at least 8 MCs must be from the following list of modules. *Subject to approval, students are allowed to choose not more than 12 MCs from level 5000 modules offered by other Departments.*
   - PC5201 Advanced Quantum Mechanics
   - PC5202 Advanced Statistical Mechanics
   - PC5203 Advanced Solid State Physics
   - PC5210 Advanced Dynamics
   - PC5214 Principles of Experimental Physics
2. Read and pass **two** PC level 4000 modules amounting to 8 MCs
3. Complete a research project PC5288 equivalent to 12 MCs
4. Obtain a minimum Cumulative Average Point (CAP) of 3.00

OR
1. Read and pass **eight** PC level 5000 modules (excluding PC5198) amounting to 32 MCs and at least 8 MCs must be from the following list of modules. *Subject to approval, students are allowed to choose not more than 12 MCs from level 5000 modules offered by other Departments.*
   - PC5201 Advanced Quantum Mechanics
   - PC5202 Advanced Statistical Mechanics
   - PC5203 Advanced Solid State Physics
   - PC5210 Advanced Dynamics
   - PC5214 Principles of Experimental Physics
2. Read and pass **two** PC level 4000 modules amounting to 8 MCs
3. Obtain a minimum Cumulative Average Point (CAP) of 3.00

**Track 2: 80 modular-credit programme** (for applicants who have a Bachelor’s pass degree or completed a three-year study in physics)

**EITHER**

1. Read and pass **five** PC level 5000 modules (excluding PC5198) amounting to 20 MCs and at least 8 MCs must be from the following list of modules. **Subject to approval, students are allowed to choose not more than 12 MCs from level 5000 modules offered by other Departments.**
   - PC5201 Advanced Quantum Mechanics
   - PC5202 Advanced Statistical Mechanics
   - PC5203 Advanced Solid State Physics
   - PC5210 Advanced Dynamics
   - PC5214 Principles of Experimental Physics

2. Read and pass **eight** PC level 4000 modules amounting to 32 MCs
3. Read and pass **one** PC level 4000 module or PC level 5000 module amounting to 4 MCs
4. Read and pass **three** PC level 3000 modules amounting to 12 MCs
5. Complete a research project **PC5288** equivalent to 12 MCs
6. Obtain a minimum Cumulative Average Point (CAP) of 3.00

**OR**

1. Read and pass **eight** PC level 5000 modules (excluding PC5198) amounting to 32 MCs and at least 8 MCs must be from the following list of modules. **Subject to approval, students are allowed to choose not more than 12 MCs from level 5000 modules offered by other Departments.**
   - PC5201 Advanced Quantum Mechanics
   - PC5202 Advanced Statistical Mechanics
   - PC5203 Advanced Solid State Physics
   - PC5210 Advanced Dynamics
   - PC5214 Principles of Experimental Physics

2. Read and pass **eight** PC level 4000 modules amounting to 32 MCs
3. Read and pass **one** PC level 4000 module or PC level 5000 module amounting to 4 MCs
4. Read and pass **three** PC level 3000 modules amounting to 12 MCs
5. Obtain a minimum Cumulative Average Point (CAP) of 3.00

**Period of Candidature**

The programme may be undertaken over a period of two to eight semesters for Track 1 or four to ten semesters for Track 2, and will comprise of coursework or coursework and a written report based on project work. Some classes will be conducted during the university semesters in the evening.

**Programme Intake**

There are two intakes per academic year, one in January and the other in August.