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. 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.