

**Master of Science Program in Nanoscience and Nanotechnology (International Program)**

**M.Sc. (Nanoscience and Nanotechnology)**

**Philosophy:**

Master of Science Program in Nanoscience and Nanotechnology is a multidisciplinary program applying several fields of science including basic science, applied science, engineering and medical science to create innovations and a body of knowledge in nanotechnology. It is intended to produce graduates who are proficient in practical and analytical skills necessary for research and development in nanotechnology.

**Objectives:**

1. To produce researchers who have knowledge cum practical and analytical skills in nanotechnology, which is in itself multidisciplinary to work in research institutes, government and industrial sectors or to further study for doctoral degrees.
2. To support research and development in nanotechnology with local and international standards.
3. To seek academic cooperation with local and international institutes.

**Qualifications of a prospective candidate:**

The qualifications of applicants for admission to all study plans are in accordance with the regulations of the King Mongkut's University of Technology Thonburi on Graduate Studies, B.E. 2562 (2019)

Both Thai and foreign applicants must complete a bachelor's degree or are studying in the last semester of the Bachelor of Science program (B.Sc.), Bachelor of Engineering program (B.Eng.) or other equivalent programs with a cumulative grade point average not less than 2.75. For those with a grade lower than 2.75 must have research experiences related to the field of study. This shall be at the discretion of the program committee in considering the applicants on the following issues:

1. Publication
2. Awards Other works
3. Co-Curricular activities related to the program
4. Registered subjects

This may change depending on the announcement of King Mongkut's University of Technology Thonburi.

**Professions after graduation:**

1. Researchers/Specialists in science or nanotechnology
2. Nanotechnology developers
3. Consultants in science and/or nanotechnology projects
4. Research project analysts in science and/or nanotechnology
5. Sales engineer for technical support and services in nanotechnology business

**Curriculum**

Total Program Credits

Plan 1.2 Dissertation (Dissertation 24 Credits) 36 Credits

Plan 1.2 Dissertation (Dissertation 12 Credits) 36 Credits

**Curriculum Components**

Plan 1.2 Dissertation (Dissertation 24 Credits)

Major Course	9 Credits
Elective Course	3 Credits
Seminar	2 Credits (S/U)
Dissertation	24 Credits

Plan 1.2 Dissertation (Dissertation 12 Credits)

Major Course	9 Credits
Elective Course	15 Credits
Seminar	2 Credits (S/U)
Dissertation	12 Credits

**COURSE STRUCTURE**

**Plan 1.2 (Dissertation 24 Credits)**

**First Year**

<b>First Semester</b>	<b>Credits</b>
NST 601 Introduction to Nanoscience and Nanotechnology	3(3-0-9)
NST 602 Fabrication and Characterization in Nanotechnology	3(3-0-9)

NST 690 Seminar I	1(0-2-3) (S/U)
XXX xxx Selective 1	3(3-0-9)
Total	9(9-2-30)

**First Year**

**Second Semester**

**Credits**

NST 603 Research Methodology for Nanoscience and Nanotechnology	3(3-0-9)
NST 691 Seminar II	1(0-2-3) (S/U)
NST 791 Thesis	6(0-12-24)
Total	9(3-14-36)

**Second Year**

**First Semester**

**Credits**

NST 791 Thesis	10(0-20-40)
Total	10(0-20-40)

**Second Year**

**Second Semester**

**Credits**

NST 791 Thesis	8(0-16-32)
Total	8(0-16-32)

**Plan 1.2 (Dissertation 12 Credits)**

**First Year**

**First Semester**

**Credits**

NST 601 Introduction to Nanoscience and Nanotechnology	3(3-0-9)
NST 602 Fabrication and Characterization in Nanotechnology	3(3-0-9)
NST 690 Seminar I	1(0-2-3) (S/U)
XXX xxx Selective 1	3(3-0-9)
Total	9(9-2-30)

**First Year**

**Second Semester**

**Credits**

NST 603 Research Methodology for Nanoscience and Nanotechnology	3(3-0-9)
NST 691 Seminar 2	1(0-2-3) (S/U)
NST 792 Thesis	2(0-4-8)
XXX xxx Selective 2	3(3-0-9)
XXX xxx Selective 3	3(3-0-9)
Total	11(9-6-38)



**Second Year**

**First Semester**

NST 792 Thesis

XXX xxx Selective 4

XXX xxx Selective 5

Total

**Credits**

4(0-8-16)

3(3-0-9)

3(3-0-9)

10(6-8-34)

**Second Year**

**Second Semester**

NST 792 Thesis

Total

**Credits**

6(0-12-24)

6(0-12-24)