

GRADUATE SCHOOL MISSION STATEMENT

We are a Catholic institution dedicated to advancing the frontiers of knowledge in the theoretical and applied fields through quality graduate education that is comprehensive and responsive to the needs of society. We are committed to the formation of scholars and high level professionals who are ethical, competent, compassionate and committed to the service of the Church, the Nation and the Global Community.

GRADUATE SCHOOL VISION STATEMENT

We envision a Graduate School that stands for excellence and innovation and that will be globally identified for the distinction of its programs and quality of its research.

GRADUATE SCHOOL GOALS

To realize this mission-vision, the Graduate School commits itself within the next five (5) years:

- To develop the intellect and creativity through excellence in instruction, research, and extension work.
- To form scholars and high level professionals in the arts and humanities, the natural and allied health sciences, the social and management sciences who are ethical and who demonstrate competencies functional in both the local and global workplace.
- To hone the professional and social skills, and critical capabilities of students enabling them to become responsible leaders in their careers and community.
- To provide students opportunities to serve the larger community through extension work and community service.
- To produce quality research in the various fields of knowledge that is internationally recognized.

- To recruit Faculty who are acknowledged experts in the field and to complement the teaching staff by inviting international scholars in the various disciplines.
- To build partnerships and linkages between the Graduate School and academic institutions, industry and government entities at the local and international level.
- To enhance the image and visibility of the Graduate School and its work in both the local and global community.

APPLICATION PROCEDURES

- A. Application for admission to the UST Graduate School is until October 15 for October enrollees, April 5 for Summer enrollees and May 25 for June enrollees.
- B. Application forms for Admission are available at the UST Graduate School, UST Admissions Office & at the UST Graduate School Web Site – <http://graduateschool.ust.edu.ph>

Requirements:

Certified true copy of Transcript of Records, one (1) colored passport size, recent photo (if any) document(s) attesting to passing a Bar/Board Exam, or being a scholar of any agency.

Two (2) Referral Forms: One (1) for the current (immediate) superior (or Dean, in the case of a school); and the other, for the professor in one specialization (major) subject.

For Foreigners:

All of the above and;
TOEFL English Proficiency and Student Visa Requirements.

ADMISSION REQUIREMENTS

1. Bachelor of Science in Physics; Bachelor of Science in Applied Physics; Bachelor of Science in Physics for Teachers; or
2. Bachelor of Science in Chemistry or Bachelor of Science in Engineering with at least twelve (12)

- units in Physics (up to Modern Physics) and twenty-one (21) units in Mathematics (covering Algebra, Trigonometry, Differential & Integral Calculus, Differential Equations and Vector Analysis).
3. General average of at least 2.0/85% or B.
 4. Complete accomplished application and referral forms.

COURSE PROGRAM OVERVIEW

The Master of Science in Applied Physics major in Medical Physics is a two-year graduate degree program offered by the University of Santo Tomas (UST) Graduate School, Manila. The Program was established in 1981 as a joint project of the UST, Radiation Health Service (RHS) of the Department of Health (DOH) and Philippine Nuclear Research Institute (PNRI) of the Department of Science and Technology with technical assistance from the International Atomic Energy Agency (IAEA).

The course is intended to meet the need for qualified medical physicist in hospital departments especially the diagnostic radiology, radiotherapy, and nuclear medicine departments; the national regulatory agencies with responsibilities in radiation protection (RHS and PNRI); and the research and academic institutions.

CURRICULUM

MASTER IN MEDICAL PHYSICS (Non-Thesis Option)

PRE-REQUISITE SUBJECTS: 6 UNITS

- GS 500 - St. Thomas on Critical Thinking
- GS 501 - Research Methodology with Instrumentation

CORE SUBJECTS: 9 UNITS

- MEDPHY 600 - Biostatistics
- MEDPHY 601 - Radiation Physics
- MEDPHY 602 - Introduction to Life Sciences

MAJOR SUBJECTS: 23 UNITS

- MEDPHY 701 - Radiation Protection and Radiobiology I

- MEDPHY 702 - Radiation Protection and Radiobiology II (2 units)
- MEDPHY 703 - Physics of Diagnostic Radiology
- MEDPHY 704 - Radiation Dosimetry*
- MEDPHY 705 - Physics of Nuclear Medicine
- MEDPHY 706 - Physics of Radiation Therapy*
- MEDPHY 709 - Special Topics*
- MEDPHY 710 - Imaging in Medicine*

PRACTICUM SUBJECTS: 3 UNITS

- Practicum in Diagnostic Radiology (1 unit)
- Practicum in Nuclear Medicine (1 unit)
- Practicum in Radiation Therapy (1 unit)

ELECTIVE SUBJECTS: 4 UNITS

- MEDPHY 707 - Physics of Ultrasound (2 units)
- MEDPHY 708 - Non-Ionizing Radiation (2 units)

OTHER REQUIREMENTS

- Written Comprehensive Examinations (WCE)
- Graduate Research Seminar - 3 units

***Prerequisites:**

- Radiation Dosimetry – Radiation Physics
- Physics of Radiation Therapy – Radiation Physics
- Special Topics – Physics of Radiation Therapy
- Imaging in Medicine – Physics of Diagnostic Radiology

Total = 48 Units

PROGRAM OF STUDY FOR MASTER IN MEDICAL PHYSICS

1st Year – 1st Semester

Subject	Units
Radiation Physics	3
Introduction to Life Sciences	3
Radiation Protection and Radiobiology I	3
Total Units	9

1st Year – 2nd Semester

Subject	Units
Radiation Dosimetry *	3
Physics of Nuclear Medicine	3
Physics of Diagnostic Radiology	3

Radiation Protection and Radiobiology II	2
Total Units	11

Summer

Subject	Units
St. Thomas on Critical Thinking	3
Biostatistics	3
Total Units	6

2nd Year – 1st Semester

Subject	Units
Graduate Research Seminar	3
Physics of Radiation Therapy	3
Research Methodology with Instrumentation	3
Imaging in Medicine	3
Total Units	12

2nd Year – 2nd Semester

Subject	Units
Special Topics	3
Non-Ionizing Radiation Protection	2
Physics of Ultrasound	2
Practicum in Physics of Diagnostic Radiology	1
Practicum in Physics of Nuclear Medicine	1
Practicum in Physics of Radiation Therapy	1
Total Units	10

Summer

Subject	Units
Written Comprehensive Examination	
TOTAL Units	48

UST GRADUATE SCHOOL ADMINISTRATION OFFICIALS AND FACULTY SET-UP

LILIAN J. SISON, Ph.D.
Dean

JOSÉ ANTONIO E. AUREADA, O.P., S.Th.D.
Regent

MICHAEL ANTHONY C. VASCO, Ph.D.
Faculty Secretary

CARLOS P. GARCIA, Ph.D.
Director for Graduate Research

GRECEBIO JONATHAN ALEJANDRO, Ph.D.
*Supervising Scientist,
UST Graduate School Science Laboratories*

ROMUALDO M. DEL ROSARIO, Ph.D.
Supervising Scientist, UST Botanical Garden

PROFESSORIAL STAFF

NATHANIEL DE VERA, M. Sc.
AUGUSTO A. MORALES JR., D. Sc.
PETER P. NG, Ph.D.
AGNETTE P. PERALTA, M. Sc.
LILIAN V. RODRIGUEZ, M. Sc.
BAYANI C. SAN JUAN, M. Sc.
LILIAN J. SISON, Ph.D.
TERESITA SY-ORTIN, MD, FPCR
MARLON Z. TECSON, M. Sc.
EULINIA M. VALDEZCO, M. Sc.

SUMMARY OF COURSE REQUIREMENTS

Requirements	Units
Required	6
Core Subjects	9
Major Subjects	23
Practicum	3
Electives	4
Written Comprehensive Exam	--
Graduate Research Seminar	3
TOTAL Units	48

SCHOOL CALENDAR

The University of Santo Tomas follows an Academic Year Calendar of two (2) semesters and a summer term.

Summer Term: April-May

For further information, please call,
Tele-Fax: (632) 740-9732 or
Tel. No. (632) 786-1611 loc 8247; 731-5396
Web-http://graduateschool.ust.edu.ph
E-mail: odgs@mnl.ust.edu.ph
or write to:

The Dean/Faculty Secretary
UST Graduate School
España, Manila, Philippines 1008

University of Santo Tomas

GRADUATE SCHOOL



GRADUATE PROGRAM

AY 2008 – AY 2009

MASTER in MEDICAL PHYSICS

(Non-Thesis Option)

España, Manila