DE LA SALLE UNIVERSITY

GRADUATE PROGRAMS IN

SCIENCE
The College of Science at De La Salle University offers relevant, diverse, and progressive graduate programs for academics, researchers, and industry professionals.

With CHED Centers of Excellence in Biology, Chemistry, Mathematics, and Physics, and a Center of Development in Statistics, the College is geared towards developing a community of scientists dedicated to advance scientific research for social development.

Respected faculty, comprehensive research activities, and well-equipped laboratories allow students to pursue path-breaking research and build on their experiences for a fulfilling career in the field.

**OVERVIEW**

Graduate programs of the DLSU College of Science provide students with the opportunity to deepen their knowledge of both the physical and life sciences, acquire the laboratory and computational skills required for the fast-changing world of science, and develop personally by establishing valuable connections with fellow graduate students, academics, and experts in the field.

**COLLEGE STRENGTHS**

- 18 graduate program offerings covering a wide area of the Life Sciences and Physical and Natural Sciences
- 85% of faculty are doctorate holders from Universities around the world.
- Full or partial scholarships covering tuition, miscellaneous fees, and research expenses
- State-of-the-art facilities
- Existing partnerships with industry, government, regional institutions, and international funding agencies
- CHED Centers of Excellence in Biology, Chemistry, Mathematics, and Physics
- CHED Center of Development in Statistics
- Accredited by the ASEAN University Network (AUN)
DOCTOR OF PHILOSOPHY IN BIOLOGY (37 UNITS)
The program is designed to provide advanced study and research in the biological sciences. Strong emphasis is placed on the development of scientific skills and values which are useful in the conduct of independent field investigation and/or laboratory experimentation. A study program consisting of selected coursework and independent projects is prepared for each student. Opportunities for representation and publication of student research are also provided.

DOCTOR OF PHILOSOPHY IN CHEMISTRY (34 UNITS)
The program is designed to provide advanced study research in Chemistry. The PhD degree in Chemistry is earned by those able to demonstrate breadth and depth of knowledge of the facts and theories of Chemistry and the ability to conduct independent chemical research as evidenced by the acceptance of a doctoral dissertation.

DOCTOR OF PHILOSOPHY IN CHEMISTRY - DOUBLE DEGREE WITH OSAKA UNIVERSITY (69 UNITS)
The program provides the opportunity to simultaneously obtain two PhD degrees after accomplishing coursework and research in DLSU and Osaka University. Research is meant to be guided by supervisors from the two universities.

DOCTOR OF PHILOSOPHY IN CHEMISTRY (36 UNITS)
The standard program is intended for BS Chemistry applicants with high aptitude for chemistry and outstanding research capabilities backed by research experience. Students in the MS program may be accepted subject to meeting certain requirements.

DOCTOR OF PHILOSOPHY IN MATHEMATICS (STRAIGHT PROGRAM, 69 UNITS)
By invitation only, from the ranks of MS students. The program is designed to provide students with an extensive grounding in mathematical concepts and principles of the life sciences, to develop appropriate skills and to inculcate in the students a proper attitude toward biological research and investigation. The courses are organized to accommodate the varied interests of students pursuing specialization in the environmental and paramedical fields, among others.

DOCTOR OF PHILOSOPHY IN PHYSICS (STRAIGHT PROGRAM, 63 UNITS)
The program provides students with advanced graduate training in Physics, preparing them for scientific careers in academia as well as in industry. The strength of the program lies in the solid state physics, materials science, semiconductor physics, theoretical physics, laser remote sensing, optics, computational physics, and instrumentation. The uniqueness of the program lies on inquiry–based courses, which is learner-centered and project-oriented. The straight PhD program attracts students who would like to finish their PhD without taking the masteral program.

MAJOR OF SCIENCE IN BIOLOGY (37 UNITS)
The program is designed to provide a strong foundation in concepts and principles of the life sciences, to develop appropriate skills and to inculcate in the students a proper attitude toward biological research and investigation. The courses are organized to accommodate the varied interests of students pursuing specialization in the environmental and paramedical fields, among others.

MASTER OF SCIENCE IN ENVIRONMENTAL SCIENCE AND ECOSYSTEM MANAGEMENT (37 UNITS)
The program intends to provide professionals with an in-depth technical background in environmental science as well as skills, attitudes, and values in the practice of environmental management. It provides a transdisciplinary partnership of the different units of the university coordinated by the Biology Department. The program trains students to prepare environmental risk assessment and environmental impact assessment and collaborate with various institutions for research on environmental issues.

MASTER OF SCIENCE IN PHYSICS (36 UNITS)
The program is designed to develop competent manpower to fill the demands of industry and academia. It is open to scientists, researchers, and teachers, who, at the end of the program, have acquired a deeper understanding of the fundamental principles and concepts in physics that would enable them to make creditable contributions to the research and development programs of industries involved in solid state, optics, semiconductor, or computational physics.

MASTER OF SCIENCE IN APPLIED PHYSICS (36 UNITS)
The program is designed around the idea that physics provides fundamental understanding of relevant problems in society and provides creative and innovative solutions to these. The program is a balance of theoretical and experimental courses aimed at facilitating students’ understanding of phenomena, the theoretical models that explain them, the measurements that illuminate them, and, most importantly, the connections among the three.

MASTER OF SCIENCE IN MATHEMATICS (36 UNITS)
The program prepares students for research and for teaching senior level mathematics courses at the undergraduate level. The program lays the foundation studies in the doctoral level. It aims to update the skills of mathematicians, enabling them to take on challenging roles in the academic, government service, and industry.

MASTER OF SCIENCE IN STATISTICS (37 UNITS)
The program prepares students for research and for advanced level work by providing them the necessary foundations for doctoral studies. It aims to develop future statisticians for the academic, government service, and industry.

MASTER OF SCIENCE IN PHYSICS (36 UNITS)
The program prepares students for research and for teaching senior level mathematics courses at the undergraduate level. The program lays the foundation studies in the doctoral level. It aims to update the skills of mathematicians, enabling them to take on challenging roles in the academic, government service, and industry.

MASTER OF SCIENCE IN APPLIED PHYSICS (36 UNITS)
The program is designed around the idea that physics provides fundamental understanding of relevant problems in society and provides creative and innovative solutions to these. The program is a balance of theoretical and experimental courses aimed at facilitating students’ understanding of phenomena, the theoretical models that explain them, the measurements that illuminate them, and, most importantly, the connections among the three.

NON-THESIS PROGRAMS

MASTER IN BIOLOGY (36 UNITS)

MASTER IN CHEMISTRY (36 UNITS)

MASTER IN MATHEMATICS (36 UNITS)

MASTER IN PHYSICS (36 UNITS)
RESEARCH LABORATORIES AND FACILITIES
High Performance Computing Laboratory
iNano Laboratory
Molecular Science Unit Laboratory
Central Instrumentation Facility
OTHER RESOURCES
CENTER FOR NATURAL SCIENCE AND ENVIRONMENTAL RESEARCH
RESEARCH UNITS:
• Applied Research for Community, Health, and Environment
• Resilience and Sustainability Unit
• Biological Control Research Unit
• Computational Materials Design Research Unit
• Condensed Matter Unit
• Materials Science and Nanotechnology Unit
• Microbial Systems and Applied Physiology Research Unit
• Natural Products and Drug Development Unit
• Optics and Instrumentation Research Unit
• Organic Materials and Interfaces Unit
• Technologist for Biodiversity Use and Conservation Unit
MANILA JOURNAL OF SCIENCE
A peer reviewed and abstracted online journal for science and technology research published by the College.
Br. Alfred Shields FSC Ocean Research (SHORE) Center
Br. Alfred Shields FSC Marine Station, Brgy. Matuod, Lian, Batangas
LABORATORY RESOURCES
The availability of wireless ports, The Learning Commons, smart classrooms, and access to international journals and electronic databases in the University facilitate students’ exposure to advanced science research. As a member of the ASEAN University Network, the University allows students access to the library databases of top universities in the ASEAN region.

DEPARTMENT OF BIOLOGY
Chona Camille Abiledo, PhD (De La Salle University)
Systematics and Population Genetics
Esperanza Maribel Aleglo, PhD (De La Salle University)
Pilat Systematics, Pilat Taxonomy and Conservation
Zebra Alam, PhD (Jawaharlal Nehru University, India)
Billy Joel Almarinez, PhD (De La Salle University)
Entomology
Divina Anmail, PhD (University of Florida, USA)
Entomology, Insect Pest Management, Biological Control, Spider Taxonomy, Biodiversity
Esperanza Cabrera, PhD (University of Santo Tomas)
Medical Bacteriology
Jose Santos Carandang, PhD (Wurzburg University, Germany)
Environmental Management and Urban Ecology, Plant Stress Physiology
Thaddeus Carvajal, Dr.Eng (Ehime University, Japan)
Mariguel delos Reyes, PhD (University of Maryland, USA)
Biotechnology
Ma. Luisa Enriquez, PhD (University of the Philippines Diliman)
Cytogenetics
Mary Jane Flores, PhD (De La Salle University)
Parasitology, Taxonomy and Systematics, Zoonotic Infections
Jose Isagani Janairo, PhD (Hokkaido University, Japan)
Biological Chemistry
Ma. Carmen Lagman, PhD (University of the Philippines Diliman)
Population and Quantitative Genetics of Fish, Molecular Ecology, Bioluminescence
Willfredo Roehl Liebman, PhD (University of Southern California, USA)
Coral Reef Ecology, Marine Ecology
Emelina Mandia, PhD (University of the Philippines Los Banos)
Ethnobotany, Plant Systematics and Ecology
Michael Flex, PhD (University of the East Ramon Magsaysay Medical Center)
Anatomy, Histopathology, Zoology
Glorieta Ramos, PhD (University of the Philippines Diliman)
Developmental Biology
Mark Christopher Felipe Redillas, PhD (Myongji University, South Korea)
Crops Biotechnology
DEPARTMENT OF CHEMISTRY
Laureen PV Alba, PhD Double Degree (De La Salle University & Osaka University)
Biochemistry
Glenn Abe, PhD (De La Salle University)
Organic Synthesis

DEPARTMENT OF CHEMISTRY
Laureen PV Alba, PhD Double Degree (De La Salle University & Osaka University)
Biochemistry
Glenn Abe, PhD (De La Salle University)
Organic Synthesis

FACULTY PROFILE
The College’s faculty members are experts in wide and diverse areas of Biology, Chemistry, Environmental Science, Mathematics, Statistics, and Physics. Seventy-one percent of faculty members are doctorate holders from universities here and abroad. They include specialists from other academic institutions, government industry, and the private sector.

Mariafe Callaging, PhD (Wageningen University, Netherlands)
Food Chemistry, Food Technology, Plant biochemistry, Systems Biology
Dr. Fr. Camacho, PhD (Tokushima University, Japan)
Polymers and Biopolymers, Organic Synthesis
Rafael Espiritu, PhD (Osaka University, Japan)
Membrane Biophysics, Programmed Cell Death
Francisco Franco Jr., PhD (Osaka University, Japan)
Molecular Systems Design, Materials Chemistry
Emmanuel Garcia, PhD (De La Salle University)
Food and Bioanalytical Chemistry, Coffee Chemistry
Joel Garcia, PhD (Wayne State University, USA)
Molecular Nanomedicine, Synthetic Biology, Cancer Genetics
Lourdes Guidote, PhD (University of Tokyo, Japan)
Bioorganic Synthesis
Gerardo Janairo, DSc (Eberhard Karls Universitat zu Tubingen, Germany)
Organic Synthesis, Carbohydrate Chemistry
Jaime Raul Janairo, PhD (De La Salle University)
Natural Products Chemistry
Nancy Lazaro-Llanos, PhD (Ohio University, USA)
Biological Membrane, Peptide Chemistry
Faith Marie Laga, PhD (De La Salle University)
Organic Synthesis, Medicinal Chemistry
Stephan (Joy) Macalino, PhD (Ehwa Woman’s University, South Korea)
Biochemistry, Pharmaceutical Sciences
Hilbert Magpantay, PhD (The University of Tokyo)
Biochemistry
Raymond Malahied, PhD (Osaka University, Japan)
Membrane Biochemistry and Biophysics, Food Chemistry
Vincent Jonmie Ng, PhD (De La Salle University)
Natural Products Chemistry
Marissa Noel, PhD (Ateneo de Manila University)
Food Chemistry, Plant Tissue Culture
David Potofsky Jr., PhD (University of Connecticut, USA)
Polymer Chemistry, Colloids, and Surface Science

Eric Punzalan, PhD (University of Connecticut, USA)
Organic Chemistry, Environmental Chemistry

Julita Robles, PhD (De La Salle University)
Inorganic Chemistry, X-ray Crystallography

Rodolfo Sumayo Jr., PhD (University College Dublin, Ireland)
Redox Biochemistry and Signaling, Translational Medicine, Biomarker Discovery

Derrick Grabilho Yu, PhD (Hokkaido University, Japan)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Yvette Lim, PhD (De La Salle University)
Graph Theory, Game Theory

Julita Robles, PhD (De La Salle University)
Mathematical Modeling, Systems Biology

Isagani Jos, PhD (De La Salle University)
Matrix Theory

Teresa Soto, PhD (University of the Philippines Diliman)
Computational Physics

Noel Fortun, PhD (De La Salle University)
Chemical Reaction Network

Kristine Joy Carpio, PhD (The Australian National University)
Stochastic Processes

Rafael Reno Cantuba, PhD (De La Salle University)
Graph Theory, Design Theory

Rodolfo Sumayo Jr., PhD (University College Dublin, Ireland)
Sampling and Small Area Estimation

Rechel Arcilla, PhD (University of the Philippines Los Baños)
Nonparametric Statistics

Karla Alarilla, MS (George Mason University, USA)
Actuarial Science

Ramon Albert, PhD (State University of New York, USA)
Reliability (Missing Data Estimation)

Angelo Alberto, MoS (University of the Philippines Diliman)
Statistical Modeling, Survey Operations, Multivariate Analysis, Nonparametric Statistics

Rechal Arcilla, PhD (University of the Philippines Los Baños)
Sampling and Small Area Estimation

Eric Punzalan, PhD (University of Connecticut, USA)
Organic Chemistry, Environmental Chemistry

Julita Robles, PhD (De La Salle University)
Inorganic Chemistry, X-ray Crystallography

Carla Alarilla, MS (George Mason University, USA)
Actuarial Science

Raymundo R. Garcia, Jr., PhD (University of the Philippines Los Baños)
Materials Science

David Peñaloza Jr., PhD (University of Connecticut, USA)
Photonics, LIDAR

Ma. Cecilia Galvez, PhD (University of the Philippines Diliman)
Lifestyle Medicine

Jowi Tsidkenu Cruz, MD (St. Luke’s Medical Center College of Medicine)
Theoretical Physics

Christian Que, PhD (Osaka University, Japan)
Terahertz Spectroscopy, Semiconductor Physics

Richard Rudolf Hartmann, PhD (University of Exeter)
Condensed Matter Physics

Re: Nat. Ronald Macatangay, PhD
(University of Rome, Roma, Germany)
Environmental Physics

Maria Carla Manzano, PhD (De La Salle University)
Conducting Polymers, Material Science

Dickeston Moreno, PhD (University of Miami - Columbia, USA)
Advanced Engineering, Medical Physics

Joaquin Lorenzo Moreno, PhD (Osaka University, Japan)
Theoretical Computational Physics

Joselito Muldera, PhD (University of the Philippines)
Terahertz Spectroscopy, Semiconductor Physics

Michelle Nataliva, PhD (De La Salle University)
Computational Materials and Materials Science

Reggie Panting, PhD (University of the Philippines Diliman)
Thermal Physics

Romeric Pobe, PhD (University of the Philippines Diliman)
Instrumentation and Optics, Computational Physics and Photonics

Chung C. Ong, PhD (Osaka University, Japan)
Terahertz Spectroscopy, Semiconductor Physics

Reuben Quiroga, PhD (University of the Philippines)
Solid State Physics

Ofelia Remigio, PhD (University of Calgary, Canada)
Atmospheric Science and Stable Isotope Science

Nesie Grace Resurreccion, MS
(University of the Philippines Los Baños)
Environmental Physics

Emmanuel Rodulfo, PhD (University of the Philippines Diliman)
Theoretical Physics

Lydia Rolda, PhD
(De La Salle University & University of the Philippines Diliman)
Solid State Physics, Physics Education

Robert Rolda, PhD
(De La Salle University & University of the Philippines Diliman)
Theoretical Physics

Gil Noeauto Santos, PhD (University of the Philippines Diliman)
Nanomaterials, Materials Science and Nanotechnology

Rheinh Simon, PhD (University of the Philippines Diliman)
Optics, Materials Science

Eddie Valian, PhD (University of the Philippines Diliman)
Photonics, LiDAR

Al Rey Villagracia, PhD (De La Salle University)
Computational Physics

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www.facebook.com/DLSU-College-of-Science

For more information, contact:
Office of Admissions and Scholarships
2/F Henry Sy, Sr. Hall
E-mail: graduate.admissions@dlsu.edu.ph
Website: www.dlsu.edu.ph/admissions/graduate

The DOST is offering scholarships through the Accelerated Science and Technology Human Resource Development Program (ASTHRDP).

For more information, contact:
Commission on Higher Education (CHED) Scholarships
The DOST is offering scholarships through the Accelerated Science and Technology Human Resource Development Program (ASTHRDP).

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