



Department of Applied Mathematics

Introduction

The department of Applied Mathematics at NCYU aims to train human resources in the area related to applied mathematics, provides courses for the ability to think independently and analyze logically. Students are encouraged to take both pure and applied mathematics courses. Most of applied mathematics courses plan to teach computer skills for solving practical issues. When students are studying, they can explore the issues of applied mathematics, discover their interests and learn mathematical knowledge.

Curriculum

In addition to strengthening the overall understanding of fundamental mathematics and its applications, the courses, offered by the department, are distributed in the areas of applied mathematics, statistics, and computational science. The department allows sophomores to choose, according to interest, between computation science, information & analysis, probability & statistical science as a major course of study.

To accomplish the Bachelor's program, the students have to take 55 compulsory credits as well as at least 43 elective credits of applied mathematics-related courses. In addition, 30 credits of general courses are also required.

To accomplish the Master program, the students have to take 20 credits of elective courses, 4 credits of seminars, and 6 credits of Master thesis.

Faculty

There are 13 faculties in the department, including five professors, five associate professors, three assistant professors. All obtained Ph.D.s of mathematical or statistical departments and have a lot of teaching experience.

Facilities

There are two computation classrooms: a multimedia and a scientific computation in the department. Available Software includes COMSOL Multiphysics、REALVIZ Stitcher、ImageModeler、TrueSpace、Director MX 2004、Studio、Matlab、Maple、Mathematica、Minitab、Statistica、Intel Visual Fortran+IMSL、S-Plus、S+SpatialStats、HLM、SigmaStat、SYSTAT、BMDP、Stata/SE 9、Xplore、SCA、NCSS、LISREL/PRELIS、AMOS. Also the free software: Python, R,...etc. are installed. Available teaching aid equipment includes a slide projector, an overhead projector, an object projector, a LCD projector, two laptop computers, a digital camcorder, etc.

Perspectives

The department aims at research and development of mathematical science. The research groups are divided into three parts: computational science, probability and statistics, and information science. Micro and nano computing, information digitalizing contents design, cloud computing & eBook, artificial intelligence, applied information software and public lecture in mathematics are included in researching pursuits. The faculty plan to participate in researches based on multidisciplinary and industrial cooperation.

Career Development

Our students go on to a wide range of fields after graduation. Some continue to graduate school in applied mathematics, information science(teaching aids), statistics, finance, management and mathematics education. Many begin careers in software engineering, biology, industrial design, financial analysis, quality control, actuarial science, and mathematics education.

Web Site : <https://www.ncyu.edu.tw/math/>

