

Graduate Institute of Mathematics & Science Education

National Chiayi University

Taiwan



Introduction

Graduate Institute of Mathematics & Science Education (GIMSE) is the only academic institute in the area of Yunlin, Chiayi & Tainan in Taiwan to provide the programs for training students and teachers in mathematics and science education. The major objectives of the institute are to cultivate teachers and researchers who will attempt to serve at both formal and informal educational institutions. The programs include research methods, curriculum design and development, teaching strategies, assessment techniques, and history and philosophy of mathematics or of science.



Requirements

Students in Master's programs of GIMSE are required to complete 34 credits, including 6 thesis credits. The core courses include methodology, mathematics and science education, and foundations for mathematics, science, and computer science.





Faculty Members & Research Focuses

There are four professors and three associate professors in GIMSE. All faculties have their research interests, focusing on concept development, curriculum and instruction, student learning, assessment, professional development of mathematics or science teachers, digital learning and multimedia design.

Professor Ru-Fen Yao(Convener)



Educational Background	Ph.D., National Chang-Hua University of Education, Taiwan
Research Interest	Mathematics education, Mathematics teacher education, Math learning of disadvantaged students
Course	Qualitative Research, Abstract Algebra, The Study of Math Teaching Design, The Study of Math Teaching Practice, Multiculture and Math Education

Professor Shiang-Tung Liu



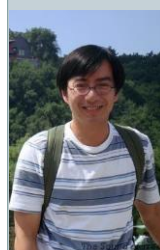
Educational Background	Ph.D., University of Memphis, USA.
Research Interest	Mathematics concept development, Mathematics problem solving, Mathematics Writing
Course	Advanced Probability, The Study of Mathematics Concepts Development, Constructivism and Mathematics Learning, Mathematics Learning Psychology

Professor Der-Ching Yang



Educational Background	Ph.D., University of Missouri- Columbia, USA
Research Interest	Mathematics Education
Course	The Study of Mathematics Curriculum Development, History of Mathematics and Mathematics Education, Literature Review in Mathematics Education

Professor Shu-Sheng Lin



Educational Background	Ph.D., National Taiwan Normal University, Taiwan.
Research Interest	Science curriculum and instruction, Teaching and learning of socioscientific issue, Professional development of science teachers
Course	Research Methods in Education, History of Science and Science Education, Special Topics in Biology, Cognitive Psychology and Science Education

Associate Professor Shuh-Wang Tsai



Educational Background	Ph. D., The University of Iowa, USA.
Research Interest	Science Education
Course	Introduction of Science Education Research, Advanced Educational Statistics, Learning and Assessment in Science, Special Topics in Chemistry, Quantitative Data Analysis

Associate Professor Jun-Yi Chen



Educational Background	Ph.D., National Changhua University of Education, Taiwan.
Research Interest	Professional development of science teachers, Science teaching and learning
Course	Special Topics in Physics, Science Learning Psychology, Social Psychology and Science Learning, The Design and Application of Science Teaching Aids

Associate Professor Chih-Hung Lin



Educational Background	Ph.D., National Sun Yat-sen University, Taiwan.
Research Interest	Digital Image Processing, Digital Watermarking/Data Hiding, Information Security, Multimedia Interactive Design and Application, Sport Image Analysis and Application
Course	Special Topics in Information Science, Multimedia Design and Development, Application of Distant Learning in Mathematics Education



Qualifications and Career Development

Welcome anyone who has Bachelor degree on Mathematics or Science to apply for Master program in GISME. After receiving the master degree, students will be able to further pursue a Ph.D. degree or become a mathematics or science teacher, or one of research members at either a formal or informal educational institution.



Website : http://www.ncyu.edu.tw/gimse_eng/