



Doctor of Philosophy major in Mathematics Education

Academic Year 2018-2019

Reference CMO: CMO No. 53, s. 2007

Program Objectives

The Doctor of Philosophy major in Mathematics Education aims to produce educators who:

1. assume professional leadership roles involving mathematics education in the local, national or international level;
2. conceptualize and instigate progressive reforms and innovations in the educational community concerning the teaching of mathematics appropriate for the demands of the 21st century; and
3. embark as mathematicians or mathematics education faculty in colleges and universities; as decision makers in local or national education agencies; as researchers in corporations or non-profit organizations; or as high-ranking staff in foundations or international organizations.

Program Outcomes

Graduates of the Doctor of Philosophy major in Mathematics Education program are expected to:

1. demonstrate a breadth and depth of knowledge of mathematics and its applications;
2. link mathematics content to pedagogy for effective teaching that addresses educational needs;
3. design the most effective mathematics curriculum and ways to deliver this curriculum;
4. conduct original research or other forms of advanced scholarship, with statistical and qualitative interpretations, of a level of quality that meets the standards of peer review and eventually merit publication;
5. analyze problems and formulate appropriate mathematical models in a variety of areas in mathematics;
6. design various assessments, and interpret and use assessment results for planning and teaching mathematics; and
7. effectively communicate mathematics by showing the ability to read and understand basic technical mathematics, and present mathematical ideas in a coherent, literate fashion, both orally and in writing.