

Computing and Data Science MS

Technical Competence - To Develop And Demonstrate Knowledge Of Theoretical Materials, And Computational And Technical Skills

Goal Description:

Graduates with a master degree in Computing and Data Science will have a strong technical foundation, that is, to develop and demonstrate knowledge of theoretical materials, and computational and technical skills in the areas of Computing and Information Science.

Providing Department: Computing and Data Science MS

Progress: Ongoing

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

Understand The Body Of Knowledge Of Computer Science And Information Technologies

Learning Objective Description:

Students will develop and demonstrate knowledge of theoretical materials, technical skills and project management relevant to computer information systems.

RELATED ITEM LEVEL 2

Written Comprehensive Examination

Indicator Description:

Each student is required to take and pass the written comprehensive examination (WCE) in the graduating semester. Passing grade is defined as scoring 70 or above out of 100, and high pass grade is defined as scoring 85 or above out of 100. Graduate faculty who teach the current 5 core courses of computing and information science are responsible to design exam questions. Each student is given one hour on each of the 5 subjects:

1. Database Systems
2. Programming Languages
3. Data Structures
4. Operating Systems
5. Software Engineering

Faculty who gave the exam questions are responsible to grade and report grades of these exams.

Criterion Description:

Graduate faculty who gave the exam questions are responsible for grading and reporting the grades to graduate advisor. Each exam score should be numeric number between 0 and 100, so that a fail (69 or below), pass (70-84), or high pass (85-100) can be determined.

Findings Description:

Fall 2021: One CDS student has taken four comprehensive exams (Operating Systems, Language and Compiler Design, Database Systems, Algorithm Design and Analysis) and passed all.

Spring 2022: Five CDS students have taken comprehensive exams, and all passed.

RELATED ITEM LEVEL 3

Written Comprehensive Examination

Action Description:

We aim for 100% success from the Comprehensive examinations along with "A"s or "B"s. Therefore, a comprehensive exam study guide will be shared with students who will need to take the exam, also courses will be geared more toward to research direction which will help students by reflecting the expectation from capstone projects.

Update to Previous Cycle's Plan for Continuous Improvement Item

Previous Cycle's Plan For Continuous Improvement (Do Not Modify):

Closing Summary

Exit survey is conducted and results will be shared in graduate curriculum committee meeting in Fall 2022.

The GCC will conduct multiple meetings during the Fall 2022 and Spring 2023 semesters to find and apply necessary changes to the program.

Update of Progress to the Previous Cycle's PCI:

COSC 5600 Internship's Form B was prepared by Drs. Cho, An, Zhou.

MS in CDS with a Professional Plan (course-based MS Degree) has been proposed.

Online Data Science Certificate program was proposed.

New Plan for Continuous Improvement Item

Closing Summary:

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