

Performance Indicators

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions
 - a. (560) Analyze different design options (or database schemas), and identify their advantages and disadvantages
 - b. (575) Analyze the performance of potential solution strategies
 - c. (Capstone project) Analyze a complex computing problem to capture key requirements and constraints
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline
 - a. (501) Comparison of software architectures for a specific problem
 - b. (560) Design and implement a database schema, populate the database, and retrieve information through queries
 - c. (Capstone project) Final presentation on design and implementation with an emphasis on how the project evolved to meet emerging challenges
3. Communicate effectively in a variety of professional contexts
 - a. (560) Written report for final database project
 - b. (415) A short research and analysis paper discussing diversity concerns and ethical issues surrounding bias in algorithms
 - c. (Capstone project) Oral presentation
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles
 - a. (415) Recognize professional responsibilities and make informed judgments based on legal principles
 - b. (415) Recognize professional responsibilities and make informed judgments based on ethical principles
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline
 - a. (520/625) Peer evaluations from team projects
 - b. (560) Final database project
6. Apply computer science theory and software development fundamentals to produce computing-based solutions.
 - a. (560) Final database project
 - b. (505) Write a parser for a context-free grammar, and build a syntax tree
 - c. (Capstone project) Presentation of final solution with software development artifacts