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