1. Demonstrate competence in the prerequisites to the field of computing: basic science, mathematics, and communication.

2. Demonstrate mastery of the core knowledge of computing: algorithms and data structures, computer architecture and organization, data management systems, operating systems, programming languages, software engineering and architecture, and theoretical foundations.

3. Demonstrate an ability to reason critically from facts and assumptions to conclusions: to formulate, analyze, synthesize, and implement effective solutions to computing problems.

4. Possess the basic skills for application of computing knowledge: contemporary design-and-development methodologies and application of the methodologies to individual, interdisciplinary, and team problem-solving activities.

5. Take a professional attitude towards the field: understanding of responsibilities toward other computing professionals, computing industries, computing societies, diverse groups, and society as a whole, as well as an understanding of the importance of life-long learning.