



Student Learning Outcomes for B.S. in Software Engineering

1. Show mastery of the software engineering knowledge areas. Knowledge areas include: (1) Computing Essentials; (2) Mathematical and Engineering fundamentals; (3) Professional Practice; (4) Software Modeling and Analysis; (5) Software design; (6) Software Verification and Validation; (7) Software Evolution; (8) Software Process; (9) Software Quality; (10) Software Management.
2. Work as an individual and as part of a team to develop and deliver quality software artifacts. Demonstrate mastery of the programming languages, styles, techniques and tools that underlie modern software construction.
3. Reconcile conflicting project objectives, finding acceptable compromises within limitations of cost, time, knowledge, existing systems, and organizations. Demonstrate an understanding and appreciation for the importance of negotiation, effective work habits, leadership, and good communication.
4. Design appropriate solutions in one or more application domains using software engineering approaches that integrate ethical, social, legal, and economic concerns.
5. Learn new models, techniques, and technologies as they emerge and appreciate the necessity of such continuing professional development.
6. Demonstrate an understanding of and apply current theories, models, and techniques that provide a basis for problem identification and analysis, software design, development, implementation, verification, and documentation.