Student Learning Outcomes Library

Office of Assessment & Accreditation

Indiana State University

BS Computer Engineering Technology

Spring 2020

Outcome	Related Foundational Studies or Graduate Goal
Problem Solving Skills	
1.1 Computer systems and networks: Students will apply algebra, discrete math, and basic law of physics to build, test, and operate electric circuits, computer systems and networks	Foundational Studies IIIA: Quantitative Literacy
1.2 Computer languages: Students will program in low/high-level computer languages to build microcontroller-based applications and digital logic circuits.	
1.3 Technical data management: Students will understand database principles and working mechanisms for technical data management.	
Commanding Contemporary Tools	
2.1 Apply stimulation tools: Students will apply simulation tools to verify theoretical design or trouble-shoot potential system problems.	
2.2 Analyze lab data: Students will analyze lab data using statistical tools.	
Design Skills	
3.1 Control circuitry: Students will design microcontroller-based control circuitry.	

3.2 Digital logic circuitry: Students will develop digital logic circuitry using FPGA and HDL.	
3.3 Design and implement LAN: Students will design and implement LAN for small business environments.	
Lab Skills	
4.1 Plan experiments: Students will plan experiments to collect desired data or observations	
4.2 Conduct experiments: Students will conduct experiments to truthfully record results following manual or proposed steps.	
4.3 Follow safety procedures: Students will follow safety procedure and lab protocols, handle equipment with care.	
4.4 Examine lab results: Students will examine and interpret lab results to draw conclusions.	Foundational Studies IIIA: Quantitative Literacy
Managerial Skills	
5.1 Develop work plans: Students will develop work plans with clearly defined phased goals and timeline.	
5.2 Follow work plan: Students will follow work plan by observing timeline and reporting progress.	
5.3 Modify schedule: Students will modify schedules based on progress.	
Ethics Awareness	
6.1 Analyze ethics: Students will analyze ethics issues based on professional ethics codes.	
6.2 Technology impact on society: Students will understand technology impact on society.	
Lifelong Learning	
7.1 Professional societies: Students will get involved with professional societies.	
7.2 Technological trends: Students will research the latest technological trends in a specific area.	
Teamwork Skills	
8.1 Individual role and shared duties: Students will understand individual role and shared duties.	
8.2 Respect different opinions: Students will listen to others; cooperate with teammates; respect different opinions.	
Communication Skills	
9.1 Produce technical documents: Students will produce a technical document that is factually correct, and with good logical structure, proper format, citation, and references.	Foundational Studies 10: Express themselves effectively, professionally, and

	persuasively both orally and in writing.
9.2 Technical document with minimum errors: Students will produce a technical document with a minimum of errors in spelling, punctuation, grammar and usage.	Foundational Studies 10: Express themselves effectively, professionally, and persuasively both orally and in writing.
9.3 Communicate in a professional manner: Students will communicate in a professional manner and respond to questions in language that is both concise and commensurate with audience's background.	Foundational Studies 10: Express themselves effectively, professionally, and persuasively both orally and in writing.