Computer and Information Technology – Year 4

Non-Accredited Programs Only

Student Learning Outcomes (SLOs) for Academic Programs

Please list all of the student learning outcomes for your program as articulated in the assessment plan.

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
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.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Use systemic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals.

Overview of Measures/Instruments

SLO(s) *Note: Measures might be used for more than 1 SLO*	***ULG****	***Measures/Instruments*** *Please include a clear description of the instrument including when and where it is administered*	**How is the information Used?** *(include target score(s), results, and report if target(s) were met/not met/partially met for each instrument)*
1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.	C	Please see attached Curriculum map for the schedule of assessment as well as where these are being assessed.	As the program is quite new, we have collected assessment data for only year 1, and have not yet analyzed it. As per the ABET accreditation, we are to set our target scores, after the analysis of at least 1 year of data. This analysis will be done shortly.
2. Design, implement, and evaluate a computing-based solution	C, Q	Please see attached Curriculum map for the schedule of assessment as well as where these are being assessed.	As the program is quite new, we have collected assessment data for only year 1, and have not yet analyzed it. As per the ABET accreditation, we are to set our target scores, after the

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to meet a given set of computing requirements in the context of the program's discipline.			analysis of at least 1 year of data. This analysis will be done shortly.
3. Communicate effectively in a variety of professional contexts.	S	Please see attached Curriculum map for the schedule of assessment as well as where these are being assessed.	As the program is quite new, we have collected assessment data for only year 1, and have not yet analyzed it. As per the ABET accreditation, we are to set our target scores, after the analysis of at least 1 year of data. This analysis will be done shortly.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.	C, R	Please see attached Curriculum map for the schedule of assessment as well as where these are being assessed.	As the program is quite new, we have collected assessment data for only year 1, and have not yet analyzed it. As per the ABET accreditation, we are to set our target scores, after the analysis of at least 1 year of data. This analysis will be done shortly.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.	C, W, S	Please see attached Curriculum map for the schedule of assessment as well as where these are being assessed.	As the program is quite new, we have collected assessment data for only year 1, and have not yet analyzed it. As per the ABET accreditation, we are to set our target scores, after the analysis of at least 1 year of data. This analysis will be done shortly.

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6. Use systemic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals.	C, Q, R, W	Please see attached Curriculum map for the schedule of assessment as well as where these are being assessed.	As the program is quite new, we have collected assessment data for only year 1, and have not yet analyzed it. As per the ABET accreditation, we are to set our target scores, after the analysis of at least 1 year of data. This analysis will be done shortly.

**Please reference any University Learning Goal(s) (ULG) that this SLO, if any, may address or assess. C=Critical Thinking, W=Writing & Critical Reading; S=Speaking and Listening; Q=Quantitative reasoning; R=Responsible Citizenship; NA=Not Applicable*

Improvements and Changes Based on Assessment

1. Provide a short summary (1-2 paragraphs or bullets) of any curricular actions (revisions, additions, and so on) that were approved over the past two years as a result of reflecting on the student learning outcomes data. Are there any additional future changes, revisions, or interventions proposed or still pending?

As the program is quite new, we have collected assessment data for only year 1, and have not yet analyzed it. As per the Accreditation Board of Engineering and Technology (ABET) accreditation, we are to set our target scores, after the analysis of at least 1 year of data. This analysis will be done shortly.

We are considering changing the targeted accreditation body from ABET to Association of Technology Management and Applied Engineering (ATMAE) to better reflect the needs and the capacity of the program. For this, me and few other administrators will be attending the ATMAE conference on Nov 9 - 11, 2022 to better understand the process. This change could result in change of the above listed student outcomes as well as the process.

2. Please provide a brief description or bulleted list of any improvements (or declines) observed/measured in student learning. Be sure to mention any intervention made that has not yet resulted in student improvement (if applicable).

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3. Using the form below, please document annual faculty and committee engagement with the assessment process (such as the review of outcomes data, revisions/updates to assessment plan, and reaffirmation of SLOs).

History of Annual Review		
Date of Annual Review	**Individuals/Groups who Reviewed Plan**	**Results of the Review (i.e., reference proposed changes from #1 above, revised SLOs, etc...)**
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Dean Review & Feedback

The assessment data and collected for Computer & Information Technology (CIT) is positive. As a relatively new program (4 years), CIT is in the infancy of developing a solid assessment plan, the main

aim of which will be "closing the loop," or using the assessment data to influence program improvement. As mentioned in the report, the program may pursue ATMAE accreditation, which is a change from the previous consideration of pursuing ABET accreditation. This change will necessitate modification of the program objectives to more closely align with ATMAE accreditation standards, and will result in a much for comprehensive assessment plan as accreditation is sought, using both direct and indirect measures to inform program improvements.

C. C 11/15/22

Dean or designee Date

Academic Affairs Review & Feedback: B.S. Computer & Information Technology

The SLO report documents the Computer & Information Technology program's plan to pursue a new course of action in the realm of assessment. Using training and information from professional organizations such as the Accreditation Board of Engineering and Technology (ABET) and the Association of Technology Management and Applied Engineering (ATMAE), the program is weighing its options. The decision to prepare for accreditation from one body and not another will be instrumental in determining the shape and scope of the faculty's assessment activity. The curriculum map, developed for ABET requirements, shows the program's deliberate and careful approach to learning from the data gathered on student learning outcomes.

Suzie Park, VPAA Office 12/14/22

	First Year / Freshmen			Second Year / Sophomore							Third Year / Junior					Fourth Year / Senior						
	Fall		Spring	Fall				Spring			Fall			Spring		Fall				Spring		
	israr	wright	wright	roberts	bhutta	allen	wright	bhutta	bhutta	mertz	wang	grant	illia	wang	grant	lovall	israr	boonsuk	melton	boonsuk	illia	hogan
	CIT 1001	EGT 1323	CIT 1813	CIT 2523	CIT 2773	CSM 2170	EGT 2324	CIT 2803	CIT 2853	CSM 2670	CIT 4770	DGT 4814	MIS 4700	CIT 4760	DGT 3813	CIT 4663	CIT 4823	CIT 4843	EGT 3414	CIT 4749	MIS 4850	ODL 4835
Analyze complex computing problem																						
Identifies the problem and problem-solving strategy							X													X		
Applies appropriate solution method using math/science/engineering principles							X													X		
Generates a problem solution							X													X		
Evaluates alternate solutions							X													X		
Design, implement, and evaluate a computing-based solution																						
Produce a design document to implement appropriate components or techniques				X											X							
Implement a component or technique or system or solution		X													X							
Evaluate a component or technique or system or solution to determine if it meets the specifications		X													X							
Revise solution based on the results of evaluation		X													X							
Communication																						
Writing																						
Creating documents appropriate for specific audiences, purposes, genres, disciplines, and professions.		X																	X			
Crafting cogent and defensible applications, analyses, evaluations, and arguments about problems, ideas, and issues.		X																	X			
Producing documents that are well-organized, focused, and cohesive.		X																	X			
Using appropriate vocabulary, mechanics, grammar, diction, and sentence structure.		X																	X			
Understanding, questioning, analyzing, and synthesizing complex textual, numeric, and graphical sources.				X															X			
Evaluating evidence, issues, ideas, and problems from multiple perspectives.		X																	X			
Collecting and employing source materials ethically and understanding their strengths and limitations				X															X			
Speaking and Listening																			X			
Collecting, comprehending, analyzing, synthesizing and ethically incorporating source material.				X															X			
Adapting formal and impromptu presentations, debates, and discussions to their audience and purpose.				X															X			
Developing and organizing ideas and supporting them with appropriate details and evidence.				X															X			
Using effective language skills adapted for oral delivery, including appropriate vocabulary, grammar, and sentence structure.				X															X			
Using effective vocal delivery skills, including volume, pitch, rate of speech, articulation, pronunciation, and fluency.				X															X			
Employing effective physical delivery skills, including eye contact, gestures, and movement.				X															X			
Using active and critical listening skills to understand and evaluate oral communication.				X															X			
Legal/Ethics Principles																						
Identify professional competency in the discipline	X																		X			
know code of ethics for the discipline	X																		X			
Evaluate the ethical dimensions of a problem in the discipline	X																		X			
Work Effectively on a Team																						
Contributes to Team Meetings					X												X					
Facilitates the Contributions of Team Members					X												X					
Individual Contributions Outside of Team Meetings					X												X					
Fosters Constructive Team Climate					X												X					
Secure Computing																						
Investigate security vulnerabilities in a system.									X												X	
Use the principles of secure design. [Applying]					X																X	
Discuss the benefits and limitations of designing multiple layers of defenses. [Understanding]									X												X	
Analyze the tradeoffs associated with designing security into a product. [Analyzing]									X												X	
Apply security principles and practices in a system. [Applying]									X												X	