California State University, Fresno
Jordan College of Agricultural Sciences and Technology
Department of Industrial (Master of Science)
Department/Program Assessment Coordinator: Arun N Nambiar

Student Outcomes Assessment Plan (SOAP)

I. Mission Statement

The department's mission is "to prepare individual for technical, management, and educational careers in agriculture, business, industry and government for the advancement of regional and global economy". The department mission aligns with the University's mission "to boldly educate and empower students for success".

II. Institutional Learning Outcomes, Program Learning Outcomes/Goals, and SLO's [a,b,c]

A. Institutional Learning Outcomes. Fresno State ILO's are posted on the following webpage: http://fresnostate.edu/academics/oie/assessment/fresno-state-assessment.html

B. Program Learning Outcomes (Also known as Goals) and related SLO's

1. Technical Goal - Students will demonstrate advanced knowledge and develop expertise in industrial technology specialties. Students will be able to:

    1) Apply technology for smart automation and data acquisition in agriculture and related industries
    2) Employ data analysis tools to analyze, interpret and derive conclusions from data
    3) Compare and evaluate various production systems

2. Management Goal - Students will demonstrate management skills in technology-related domains. Students will be able to:

    1) Apply management and organization theory concepts to develop strategic plans for managing technology

3. Research Goal - Students will apply research methods to develop research in their chosen area. Students will be able to:

    1) Apply qualitative and quantitative research methods to formulate and conduct research.

4. Lifelong Goal - Students will enhance their communication and interpersonal skills to be successful in their chosen careers. Students will be able to:

1) Employ effective presentation techniques to make technical presentations
2) Communicate effectively using written reports

III. Curriculum Map [d]: Courses in which SLO's are addressed and evaluated

Course	PLO/SLO 1.1	PLO/SLO 1.2	PLO/SLO 1.3	PLO/SLO 2.1	PLO/SLO 3.1	PLO/SLO 4.1	PLO/SLO 4.2
IT 216		I				I	
IT 217		D	D				
IT218			I	I			
IT 219	I				I		
IT 223	D			M			
IT 280					D	D	D
IT 285			M	D			I
IT 286	M						
IT 298		M			M	M	M

IV. SLO's Mapped to Assessment Measures and Methods [e]

Assessment Measure	Evaluation Method	PLO/SLO 1.1	PLO/SLO 1.2	PLO/SLO 1.3	PLO/SLO 2.1	PLO/SLO 3.1	PLO/SLO 4.1	PLO/SLO 4.2
216 Project	Score		X					X
217 Assignment	Score			X				
218 Assignment	Score			X				
219 Project	Score	X						
223 Assignment					X			
280 Project	Score					X		
285 Assignment	Score			X	X			
286 Project	Score	X						
298 Final Project Report	Rubric							X
298 Final Project Presentation	Rubric						X	
Exit Survey		X	X	X	X	X		
Alumni Survey		X	X	X	X	X		

V. Assessment Measures: Description of Assignment and Method (rubric, criteria, etc.) used to evaluate the assignment [f]

A. Direct Measures (Department/Program must use a minimum of three different direct measures)
   1. IT 216 Project – The expected score on this project is 70% and it helps assess SLO 1.2
   2. IT 217 Assignment – The expected score on this assignment is 70% and this measure helps assess SLO 1.3
   3. IT 218 Assignment - The expected score on this assignment is 70% and this measure helps assess SLO 1.3
   4. IT 219 Project - The expected score on this project is 70% and this measure helps assess SLO 1.1
   5. IT 223 Assignment - The expected score on this assignment is 70% and this measure helps assess SLO 2.1
   6. IT 280 Project - The expected score on this project is 70% and this measure helps assess SLO 3.1
   7. IT 286 Project - The expected score on this project is 70% and this measure helps assess SLO 1.1
   8. IT 298 Project Report - The expected score on this assignment is 70% and this measure helps assess SLO 4.1
   9. IT 298 Project Presentation - The expected score is 4 or better on the rubric and this measure helps assess SLO 4.2
   10. IT 285 Assignment – The expected score on this assignment is 70% and this measure helps assess SLO 1.3 and SLO 2.1

B. Indirect Measures (Department/Program must use a minimum of one indirect measure)
   1. Exit Survey – The expected score on the exit survey is 4 and the exit survey helps assess technical goals (SLO 1.1, 1.2, and 1.3), management goals (SLO 2.1) and research goals (SLO 3.1)
   2. Alumni Survey – The expected score on the alumni survey is 4 and this indirect measure helps assess technical goals (SLO 1.1, 1.2, and 1.3), management goals (SLO 2.1) and research goals (SLO 3.1)

VI. Assessment Schedule/Timeline [g]

Academic Year	Measure	SLO	SLO
2019-2020	A1	1.2	
	A2	1.3	
	A9	4.2	
	B1	1.1	1.2
		1.3	2.1
	B2	1.1	1.2
		1.3	2.1

Academic Year	Measure	SLO	SLO
2020-2021	A4	1.1	
	A5	2.1	
	A6	3.1	
	A9	4.2	
	B1	1.1 1.2	
		1.3 2.1	
2021-2022	A3	1.3	
	A7	1.1	
	A10	1.3	
	A9	4.2	
	B1	1.1 1.2	
		1.3 2.1	
2022-2023	A1	1.2	
	A2	1.3	
	A9	4.2	
	B1	1.1 1.2	
		1.3 2.1	
2023-2024	A4	1.1	
	A5	2.1	
	A6	3.1	
	A9	4.2	
	B1	1.1 1.2	
		1.3 2.1	
2024-2025	A3	1.3	
	A7	1.1	
	A10	1.3	
	A9	4.2	
	B1	1.1 1.2	
		1.3 2.1	

VII. Closing the Loop [h,j,k]

Fresno State Closing the Loop process is described immediately below.

A major assessment report, which focuses on assessment activities carried out the previous academic year, is submitted in September of each academic year and evaluated by the Learning Assessment Team and Director of Assessment at Fresno State.

Program/Department Closing the Loop process: The department faculty will meet at the Fall retreat to evaluate the results of the assessment activities and discuss corrective actions necessary to ensure

the performance meets the expected standards. The department faculty will also evaluate the standards from time to time to discuss if the standards need to be revised in order to improve the overall quality of its graduates.