

Date:12/10/2021

Program Name: Intelligent Systems and Robotics

		CIP Code:				Department:ISR
		Year 1	Year 2	Year 3	Year 4	Year 5
Domain	Program-Level Student Learning Outcome (From ALC or ALP)	2020-2021	2021-2022	2022-2023	2024-2025	2026-2027
Content	Analyze, synthesize, and evaluate concepts and models for intelligent systems and robotics, including analyses based on relevant mathematics.	Data Collection Measure: Research Methods Class. Gather	Reflection on and Use of Findings: Implement actions for improvement	Data Collection Measure: Research Methods Class. Follow-up assessment		Data Collection Measure: Research Methods Class. Gather
Content	Construct and complete a dissertation project that advances knowledge in a focused area of research related to intelligent systems and robotics.		Data Collection Measure: Dissertation Defense. Gather baseline	Reflection on and Use of Findings: Implement actions for improvement	Data Collection Measure: Dissertation defense. Follow-up assessment	
Content	Design and create specific hardware and/or software that demonstrates proof of concept in conjunction with coursework and dissertation.	Data Collection Measure: Student paper and opens source code	Reflection on and Use of Findings: Implement actions for improvement	Data Collection Measure: Student paper and open source code. Follow-up		Data Collection Measure: Student paper and opens source code
Communication	Analyze, synthesize and communicate research results in oral and written form.	Data Collection Measure: Qualifying Exam (rubric). Gather	Reflection on and Use of Findings: Implement actions for improvement	Data Collection Measure: Qualifying Exam. Follow-up assessment (impact)		Data Collection Measure: Qualifying Exam (rubric). Gather
Critical Thinking	Identify, describe, and appraise the significance of unresolved research questions pertaining to intelligent systems and robotics.	Data Collection Measure: Literature Review (rubric). Gather	Reflection on and Use of Findings: Implement actions for improvement	Data Collection Measure: Literature Review. Follow-up assessment (impact)		Data Collection Measure: Literature Review (rubric). Gather
Integrity / Values	Demonstrate and apply salient professional ethics to the implementation of research.		Data Collection Measure: Dissertation course. Gather baseline	Reflection on and Use of Findings: Implement actions for improvement	Data Collection Measure: Dissertation course. Follow-up assessment	
Project Management	Design and conduct team-based research in the field of intelligent systems and robotics, and draw defensible conclusions from that research.		Data Collection Measure: Class and Dissertation Projects.	Reflection on and Use of Findings: Implement actions for improvement	Data Collection Measure: Class and Dissertation Projects. Follow-up	

Assessment Activity (Examples)

Gather baseline data
 (Revise rubric; gather data)
 Implement actions for improvement
 Follow-up assessment (impact data)

Revised 30 July 2019

Methods of Assessment

Direct Measures: Exam questions Student paper (rubric) Presentation (rubric)	Indirect Measures: Focus group Exit interview Alumni survey	External Direct Measures: Supervisor/Employer feedback External Professional Exam
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