

Computer Science (Software Engineering, Technical Applications and Cyber Security) Assessment Plan

Program Learning Outcomes	Measure	Criteria for Success
Graduates will be able to write correct and robust software.	CSC2052 Signature Assignment (A)	80% of the students should have an average score of at least 2.5 in each of the major areas.
Graduates will use well-known algorithms and computational techniques to solve problems.	CSC3023 Signature Assignment (2)	80% of the students should have an average score of at least 2.5 in each of the major areas.
Graduates will analyze the interaction between hardware and software.	CSC3014 Signature Assignment (A)	80% of the students should have an average score of at least 70%.
Graduates will be able to apply their technical knowledge and critical thinking to solve problems. (CC: CT)	CSC4093 Signature Assignment (2)	75% of the students will score at least 70%.
Graduates will be able to speak about their work with precision, clarity and organization. (CC: OC)	Senior Seminar: Oral presentation evaluated by a jury using a rubric (A).	80% of the students should have an average score of at least 2.5 in each of the major areas in the department rubric.
Graduates will be able to write about their work with precision, clarity and organization. (CC: WC)	Senior Seminar: Written summary evaluated by a jury using a rubric (A).	80% of the students should have an average score of at least 2.5 in each of the major areas in the department rubric.
Graduates will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand. (CC: IL)	Senior Seminar: Written summary evaluated by a jury using the information literacy portion of the departmental writing rubric (A).	80% of the students should have an average score of at least 2.5 in each of the major areas in the information literacy part of the rubric.
Graduates will collaborate effectively in teams.	ISS3042 Group assignment (2)	80% of the students should have an average score of at least 2.5 in each of the major areas.
Graduates will be able to understand and create arguments supported by quantitative evidence. (CC: QR)	ISS4014 Signature Assignment (2)	80% of the students should have an average score of at least 2.5 in each of the major areas.
Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	ISS3042 Signature Assignment (2) ISS4012 Signature Assignment (2) CSC3023 Signature Assignment (2) CSC4133/ISS4072 Signature Assignment (A)	80% of the students should have an average score of at least 2.5 in each of the major areas.

A – means that the measure is done annually
 2 – means that the measure done every two years

Information Systems Assessment Plan

Program Learning Outcomes	Measure	Criteria for Success
Graduates will be able to write correct and robust software.	MICS: CSC2052 Signature Assignment (A)	MICS: 80% of the students should have an average score of at least 2 in each of the major areas.
Graduates will analyze the interaction between hardware and software.	MICS: CSC3014 Signature Assignment (A)	MICS: CSC314: 80% of the students should have an average score of at least 7.
Graduates will demonstrate general knowledge of theories and practices in the core areas of business.	FSB: Peregrine Comprehensive Exam (A)	FSB: At or above the average total score of comparative ACBSP schools.
Students will critically analyze and apply business knowledge to solve complex business situations. (CC: CT)	FSB: CAPSIM COMP-XM Simulation Results – Balanced Score Card through 4 years (A)	FSB: Score above 70th percentile on the national COMP-XM Simulation Results FSB: Score above 55th percentile on the national COMP-XM Board Query Results
Graduates will be able to apply their technical knowledge and critical thinking to solve problems. (CC: CT)	MICS: ISS4014 Signature Assignment (2)	MICS: 80% of the students should have an average score of at least 2.5 in each of the major areas in the department rubric.
Graduates will demonstrate general knowledge of theories and practices in information systems.	MICS: Peregrine Information Systems test (in draft form) (A)	MICS: 80% of the students should have an score of 75% or more.
Graduates will be able to speak about their work with precision, clarity and organization. (CC: OC)	MICS: Senior Seminar: Oral presentation evaluated by a jury using a rubric (A).	MICS: 80% of the students should have an average score of at least 2.5 in each of the major areas in the department rubric.
Graduates will be able to write about their work with precision, clarity and organization. (CC: WC)	MICS: Senior Seminar: Written summary evaluated by a jury using a rubric (A).	MICS: 80% of the students should have an average score of at least 2.5 in each of the major areas in the department rubric.
Graduates will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand. (CC: IL)	MICS: Senior Seminar: Written summary evaluated by a jury using the information literacy portion of the departmental writing rubric (A).	MICS: 80% of the students should have an average score of at least 2.5 in each of the major areas in the information literacy part of the rubric.
Graduates will collaborate effectively in teams.	MICS: ISS3042 Group assignment (2) FSB: CAPSIM COMP-XM Simulation (Team Assignment) Results (A) FSB: CAPSIM COMP-XM Knowledge of Team Module Results (A) FSB: CAPSIM COMP-XM Peer Evaluation Module Results (A)	MICS: 80% of the students should have an average score of at least 2.5 in each of the major areas. FSB: Average team score will be above 75th percentile on the national Capstone Simulation FSB: Average student score will be above the 75th percentile on the COMP-XM Knowledge of Teamwork Module FSB: Average student score will be a 4.5 or higher on a 5.0 scale in both areas of the Capstone Peer Evaluation Module
Graduates will be able to understand and create arguments supported by quantitative evidence. (CC: QR)	ISS4014 Signature Assignment (2)	MICS: 80% of the students should have an average score of at least 2.5 in each of the major areas
Graduates will formulate business decisions informed by ethical attitudes and values.	FSB: CAPSIM COMP-XM Ethics Module Results (A)	FSB: Average student score will be above the 55th percentile on the national COMP-XM Ethics Module
Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	ISS3042 Signature Assignment (2) ISS4012 Signature Assignment (2) ISS4072 Signature Assignment (A)	MICS: 80% of the students should have an average score of at least 2.5 in each of the major areas

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2 – means that the measure done every two years

Mathematics, Applied Mathematics and Data Science Assessment Plan

Program Learning Outcomes	Measure	Criteria for Success
Graduates will be able to demonstrate facility with analytical and algebraic concepts.	MTH2074 Signature Assignment (A)	80% of the students should have an average score of at least 2.5 in each of the major areas.
Graduates will be able to write proofs.	MTH3012 (A), MTH4024 (2) and MTH4044 (2) Signature Assignments	80% of the students to score a 2.5 or higher in each of the areas on the department rubric.
Graduates will be able to apply their mathematical knowledge and critical thinking to solve problems. (CC: CT)	MTH2033 Signature Assignment (A)	80% of the students should have an average score of at least 2.5 in each of the major areas.
Graduates will be able to use technology to solve problems.	CSC2052/2052L Signature Assignment (A) MTH3083 Signature Assignment (2)	CSC2052: 80% of the students should have an average score of at least 2 in each of the major areas. MTH3083: 80% of the students should have an average score of at least 2.5 in each of the major areas.
Graduates will be able to speak about their work with precision, clarity and organization. (CC: OC)	Senior Seminar: Oral presentation evaluated by a jury using a rubric (A).	80% of the students should have an average score of at least 2.5 in each of the major areas in the department rubric.
Graduates will be able to write about their work with precision, clarity and organization. (CC: WC)	Senior Seminar: Written summary evaluated by a jury using a rubric (A).	80% of the students should have an average score of at least 2.5 in each of the major areas in the department rubric.
Graduates will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand. (CC: IL)	Senior Seminar: Written summary evaluated by a jury using the information literacy portion of the departmental writing rubric (A).	80% of the students should have an average score of at least 2.5 in each of the major areas in the information literacy part of the rubric.
Graduates will collaborate effectively in teams.	MTH3052 Group assignment (2) Group rubric/questionnaire	80% of the students should have an average score of at least 2.5 in each of the major areas.
Graduates will be able to understand and create arguments supported by quantitative evidence. (CC: QR)	MTH3083 Signature Assignment (A)	80% of the students should have an average score of at least 2.5 in each of the major areas.
Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	MTH3083 Signature Assignment (A) MTH4133/MTH4072/MTH4062 Signature Assignment (A)	80% of the students should have an average score of at least 2.5 in each of the major areas.

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Assessment Schedule

	CS Learning Outcome	IS Learning Outcome	Math/DS Learning Outcome	Frequency
CSC/ISS/MTH4081 Senior Seminar	Graduates will be able to speak about their work with precision, clarity and organization. (CC: OC)	Graduates will be able to speak about their work with precision, clarity and organization. (CC: OC)	Graduates will be able to speak about their work with precision, clarity and organization. (CC: OC)	Every Spring
CSC/ISS/MTH4081 Senior Seminar	Graduates will be able to write about their work with precision, clarity and organization. (CC: WC)	Graduates will be able to write about their work with precision, clarity and organization. (CC: WC)	Graduates will be able to write about their work with precision, clarity and organization. (CC: WC)	Every Spring
CSC/ISS/MTH4081 Senior Seminar	Graduates will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand. (CC: IL)	Graduates will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand. (CC: IL)	Graduates will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand. (CC: IL)	Every Spring
CSC/ISS/MTH4133 Signature Assignment	Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	Every Spring
CSC2052 Signature Assignment	Graduates will be able to write correct and robust software.	Graduates will be able to write correct and robust software.	Graduates will be able to use technology to solve problems.	Every Fall
CSC3014 Signature Assignment	Graduates will analyze the interaction between hardware and software.	Graduates will analyze the interaction between hardware and software.		Every Spring
CSC3023 Signature Assignment	Graduates will use well-known algorithms and computational techniques to solve problems.			Even Numbered Fall
CSC4093 Signature Assignment	Graduates will be able to apply their technical knowledge and critical thinking to solve problems. (CC: CT)			Odd Numbered Spring
ISS3042 Group assignment	Graduates will collaborate effectively in teams.	Graduates will collaborate effectively in teams.		Even Numbered Fall
ISS3042 Signature Assignment	Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.		Even Numbered Fall

	CS Learning Outcome	IS Learning Outcome	Math/DS Learning Outcome	Frequency
ISS4012 Signature Assignment	Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.			Odd Numbered Fall
ISS4014 Signature Assignment	Graduates will be able to understand and create arguments supported by quantitative evidence. (CC: QR)	Graduates will be able to understand and create arguments supported by quantitative evidence. (CC: QR)		Even Numbered Spring
ISS4014 Signature Assignment	Graduates will be able to apply their technical knowledge and critical thinking to solve problems. (CC: CT)	Graduates will be able to apply their technical knowledge and critical thinking to solve problems. (CC: CT)		Even Numbered Spring
ISS4072 Signature Assignment	Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.		Every Semester with Enrollment
ISS4081 Senior Seminar (Peregrin Test)		Graduates will demonstrate general knowledge of theories and practices in information systems.		Every Spring
MTH2033 Signature Assignment			Graduates will be able to apply their mathematical knowledge and critical thinking to solve problems. (CC: CT)	Every Spring
MTH2074 Signature Assignment			Graduates will be able to demonstrate facility with analytical and algebraic concepts.	Every Fall
MTH3012 Signature Assignment			Graduates will be able to write proofs.	Every Spring
MTH3052 Group assignment			Graduates will collaborate effectively in teams.	Odd Numbered Spring

	CS Learning Outcome	IS Learning Outcome	Math/DS Learning Outcome	Frequency
MTH3083 Signature Assignment			Graduates will be able to use technology to solve problems.	Every Spring
MTH3083 Signature Assignment			Graduates will be able to understand and create arguments supported by quantitative evidence. (CC: QR)	Every Spring
MTH3083 Signature Assignment			Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	Every Spring
MTH4024 Signature Assignment			Graduates will be able to write proofs.	Odd Numbered Fall
MTH4044 Signature Assignment			Graduates will be able to write proofs.	Even Numbered Fall
MTH4151 Signature Assignment			Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	Every Semester with Enrollment
MTH4072 Signature Assignment			Graduates will understand the professional, ethical and social issues and responsibilities with the implementation and use of technology.	Every Semester with Enrollment
General Education Courses: MTH1044, MTH1064, MTH1073, MTH3003, MAT1013 and MAT1093				Every Semester