Department of Business and Information Technology
College of Applied Science and Technology
The University of Akron

Business Management Technology (BMT) Discipline/Program-Level Outcomes

1. Understand business organizations, their processes, and their interactions.
2. Demonstrate knowledge and skills in quantitative reasoning to interpret and communicate qualitative and quantitative data to management.
3. Apply information technology to research, analyze and solve business problems.
4. Demonstrate effective oral and written communication skills and critically evaluate information to solve problems, make decisions in business and work effectively in teams.
5. Recognize and apply knowledge of legal, global, ethical and cultural diversity issues in business and in society.
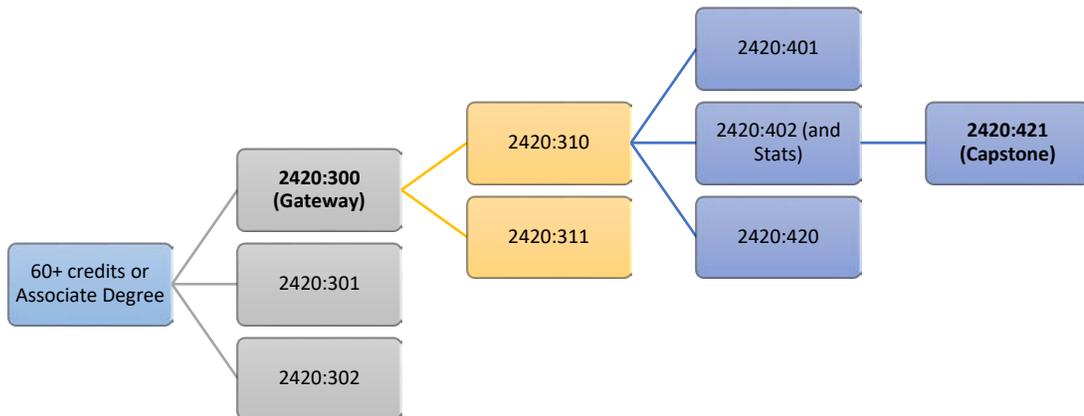
Computer Information Systems (CIS) Discipline/Program-Level Outcomes

1. Apply logical thinking and problem solving skills to effectively solve business problems using information technology.
2. Demonstrate oral and written communications to collect business process information, clarify business needs and communicate proposed business solutions.
3. Demonstrate interpersonal relation skills by working as an effective team member to solve business problems.
4. Analyze and synthesize IT information to apply learned skills to new technologies and software languages beyond the scope of the curriculum.
5. Demonstrate skill proficiency in the chosen CIS degree option.

Bachelor of Organizational Supervision (BOS) Assessment Plan

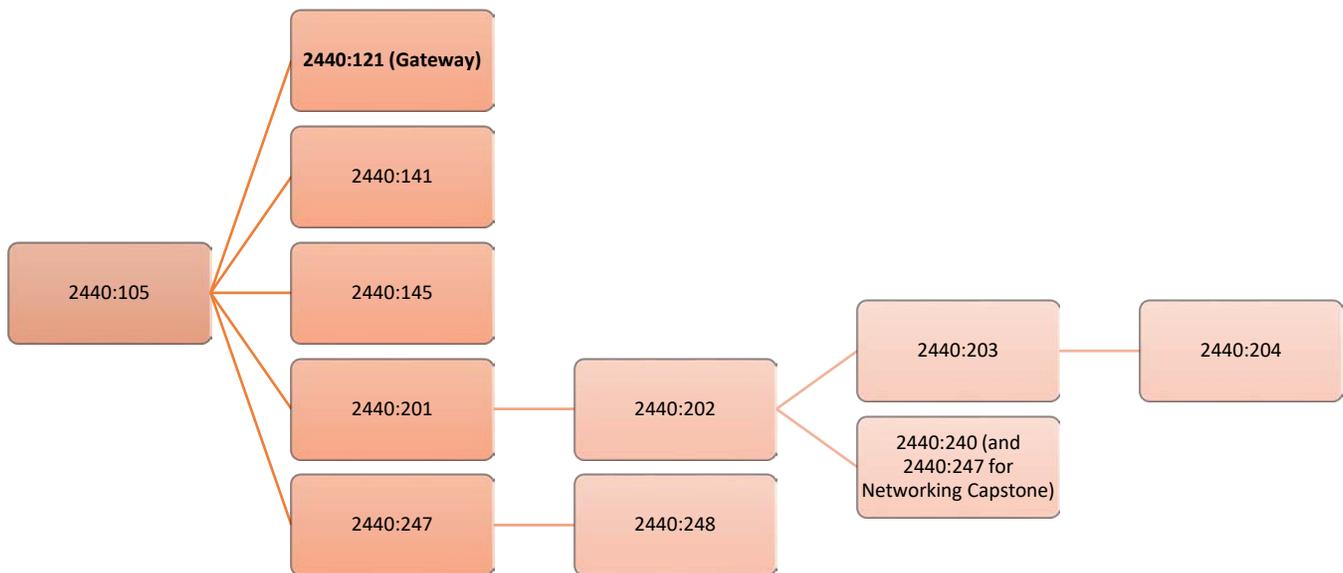| Program Learning Outcomes	Assessed Course	Measurement Tool	Expectation
1. Develop supervisory skills to become an effective leader.	2420:300 Supervision	Comprehensive final exam	85% of students should attain a score of 73% or better on the final exam.
2. Understand organizations, their processes, and their interactions.	2420:310 Leadership Principles and Practice	Final exam	80% of students should attain a score of 73% or better on the final exam.
3. Apply information technology and other analytical skills to analyze and solve business problems.	2420:301 Information Design	A combination of projects and exams is used to assess student competencies.	80% of students should attain a score of 73% or better on the projects and exams.
4. Implement legal and ethical decision-making practices to support the organization and its stakeholders.	2420:302 Ethics & Law in Business	A final exam is used to assess student competencies on the core concepts and applications of the subject matter.	It is expected that 80% of students attain a score of 73% or better on the final exam.
5. Develop skills to better lead and engage employees within culturally diverse environments.	2420:311 Corporate Social Responsibility and Leadership	Combination of projects and exams	80% of students should attain a score of 73% or better on the projects and exams.
6. Demonstrate knowledge and skills for effective strategic decision making within an organization by completing a capstone course.	2420:421 Senior Seminar in Organizational Supervision	Final exam	85% of students should attain a score of 75% or better on the final exam.

BOS Course Prerequisite Mapping

AAB CIS – Cisco Networking Assessment Plan

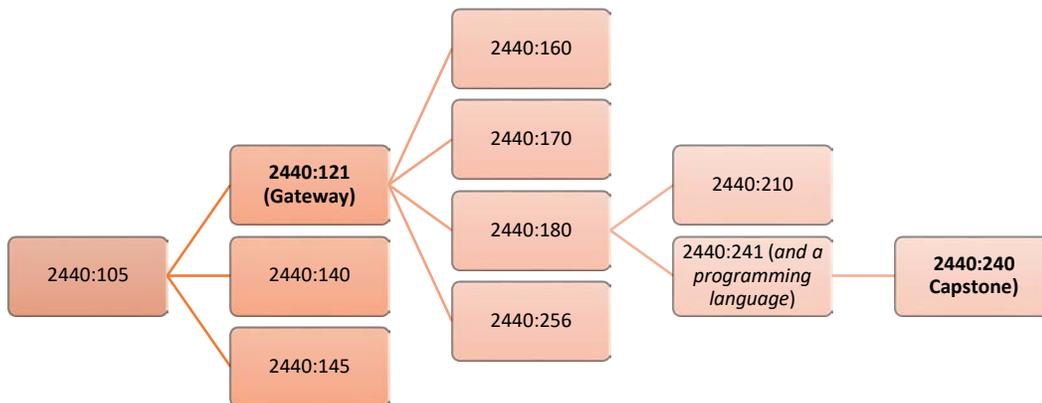| Program Learning Outcomes	Assessed Course	Measurement Tool	Expectation
1. Apply logical thinking and problem solving skills to effectively solve business problems using information technology. (AABCISCN PLO1)	2440:121 Intro to Logic/Programming	Combination of lab assignments and exams.	It is expected that about 70% of the students attain a score of 73% or higher on the labs assignments and exams.
2. Understand the basic terms, models and protocols applicable to any network. (AABCISCN PLO2)	2440:201 Networking Basics	Combination of a skill final exam and a written final exam.	It is expected that 70% of the students attain the overall scores of 70% or higher on the skill final exam and written final exam.
3. Understand, implement and secure networking devices in a small to medium-sized network topology. (AABCISCN PLO3)	2440:203 Switching Basics and Wireless Networks	Combination of a skill final exam and a written final exam.	It is expected that 70% of the students attain scores of 70% or higher on the skill final exam and written final exam.
4. Demonstrate interpersonal skills by working as an effective team member to solve business problems. (AABCISCN PLO4)	2440:240 CIS Internship	Supervisor evaluations.	It is expected that 80% of students will earn a 90% or higher on supervisor evaluations.

AAB CIS – Cisco Networking Course Prerequisite Mapping

AAB CIS – Programming Assessment Plan

Program Learning Outcomes	Assessed Course	Measurement Tool	Expectation
1. Apply logical thinking and problem solving skills to effectively solve business problems using information technology. (AABCISP PLO1)	2440:121 Intro to Logic/Programming	Combination of lab assignments and exams.	It is expected that about 70% of the students attain a score of 73% or higher on the lab assignments and exams.
2. Write, test and maintain computer programs using at least two programming languages. (AABCISP PLO2)	2440:160 Java Programming	Combination of tests, lab exercises, and a final project.	It is expected that about 70% of the students will attain a score of 73% or higher on the tests, lab exercises, and a final project.
	2440:170 Visual Basic	Combination of two tests.	It is expected that about 70% of the students attain a score of 73% or higher on two tests.
	2440:256 C++ Programming	Combination of two tests.	It is expected that about 70% of the students attain a score of 73% or higher on two tests.
3. Effectively utilize database and database management systems to organize, store and retrieve data for use by application software and websites. (AABCISP PLO3)	2440:180 Intro to Database Management	Final exam	It is expected that about 70% of the students will attain a score of 73% or higher on the final exam.
4. Analyze information technology needs to design, develop, test and maintain computer application software or systems. (AABCISP PLO4)	2440:241 Systems Analysis and Design	Combination of two tests.	It is expected that about 70% of the students attain a score of 73% or higher on the two tests.
5. Demonstrate interpersonal skills by working as an effective team member to solve business problems. (AABCISP PLO5)	2440:240 CIS Internship	Supervisor evaluations.	It is expected that 80% of students will earn a 90% or higher on supervisor evaluations.

AAB CIS - Programming Course Prerequisite Mapping

2440:105 → 2440:121 (Gateway), 2440:140, 2440:145

2440:121 (Gateway) → 2440:160, 2440:170, 2440:180, 2440:256

2440:180 → 2440:210, 2440:241 (*and a programming language*)

2440:241 (*and a programming language*) → 2440:240 Capstone)

BS CIS – Cybersecurity Assessment Plan

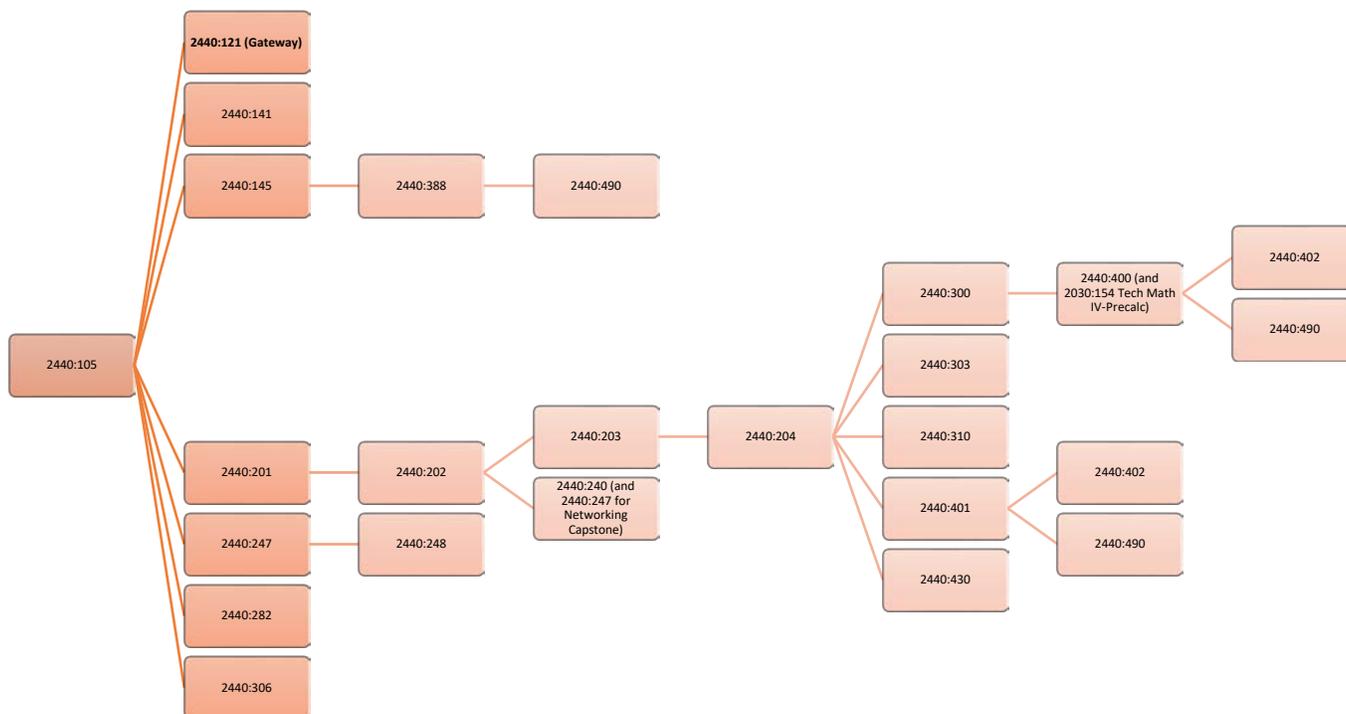| Program Learning Outcomes	Assessed Course	Measurement Tool	Expectation
1. Apply logical thinking and problem solving skills to effectively solve business problems using information technology. (BSCISC PLO1)	2440:121 Intro to Logic/Programming	Combination of lab assignments and exams.	It is expected that about 70% of the students attain a score of 73% or higher on a combination of labs assignments and exams.
2. Demonstrate a solid understanding of the principles and mathematics of public key cryptography. (BSCISC PLO2)	2030:361 Applied Cryptography	End of semester test.	A score of 80 or higher (100 maximum) indicates a solid understanding of the principles and mathematics of public key cryptography. It is expected that at least 80% of students meet or exceed the assessment benchmark while fewer than 10% of students score lower than 10 points under the benchmark.
3. Demonstrate an understanding of the goals of intrusion detection and the classic security model. (BSCISC PLO3)	2440:440 Intrusion Detection	Project and test.	It is expected that 80% of the students must receive a score of 80% or higher to indicate comprehension and understanding of the course objectives.
4. Implement legal and ethical decision-making practices in information technology. (BSCISC PLO4)	2235:383 Ethical Hacking	Combination of tests.	It is expected that about 80% of the students attain a score of 80% or higher on the tests.
5. Demonstrate comprehensive skill proficiency by researching, documenting and implementing current and advanced topics on cybersecurity. (BSCISC PLO5)	2440:491 Senior Cybersecurity Projects	Project and associated documentation.	It is expected that about 80% of the students attain a score of 70% or higher on the final project and associated documentation.

BS CIS – Digital Forensics Assessment Plan

Program Learning Outcomes	Assessed Course	Measurement Tool	Expectation
1. Apply logical thinking and problem solving skills to effectively solve business problems using information technology. (BSCISC PLO1)	2440:121 Intro to Logic/Programming	Combination of lab assignments and exams.	It is expected that about 70% of the students attain a score of 73% or higher on a combination of labs assignments and exams.
2. Demonstrate a solid understanding of the principles and mathematics of public key cryptography. (BSCISC PLO2)	2030:361 Applied Cryptography	End of semester test.	A score of 80 or higher (100 maximum) indicates a solid understanding of the principles and mathematics of public key cryptography. It is expected that at least 80% of students meet or exceed the assessment benchmark while fewer than 10% of students score lower than 10 points under the benchmark.
3. Demonstrate an understanding of the goals of intrusion detection and the classic security model. (BSCISC PLO3)	2235:281 Computer Forensic Methods	Project and test.	It is expected that 80% of the students must receive a score of 80% or higher to indicate comprehension and understanding of the course objectives.
4. Implement legal and ethical decision-making practices in information technology. (BSCISC PLO4)	2235:383 Ethical Hacking	Combination of tests.	It is expected that about 80% of the students attain a score of 80% or higher on the tests.
5. Demonstrate comprehensive skill proficiency by researching, documenting and implementing current and advanced topics on cybersecurity. (BSCISC PLO5)	2440:491 Senior Cybersecurity Projects	Project and associated documentation.	It is expected that about 80% of the students attain a score of 70% or higher on the final project and associated documentation.

BS CIS – Networking Assessment Plan

Program Learning Outcomes	Assessed Course	Measurement Tool	Expectation
1. Apply logical thinking and problem solving skills to effectively solve business problems using information technology. (BSCISN PLO1)	2440:121 Intro to Logic/Programming	Combination of lab assignments and exams.	It is expected that about 70% of the students attain a score of 73% or higher on a combination of labs assignments and exams.
2. Understand the basic terms, models and protocols applicable to any network. (BSCISN PLO2)	2440:201 Networking Basics	Combination of a skill final exam and a written final exam.	It is expected that 70% of the students attain the overall scores of 70% or higher on the skill final exam and written final exam.
3. Understand, implement and secure networking devices in a small to medium-sized network topology. (BSCISN PLO3)	2440:203 Switching Basics and Wireless Networks	Combination of a skill final exam and a written final exam.	It is expected that 70% of the students attain the overall scores of 70% or higher on the skill final exam and written final exam.
4. Demonstrate interpersonal skills by working as an effective team member to solve business problems. (BSCISP PLO5)	2440:240 CIS Internship	Supervisor evaluations.	It is expected that 80% of students will earn a 90% or higher on supervisor evaluations.
5. Implement legal and ethical decision-making practices in information technology. (BSCISP PLO5)	2440:306 Ethics & Law in IT	Combination of two tests.	It is expected that about 70% of the students attain a score of 73% or higher on the tests.
6. Demonstrate comprehensive skill proficiency by researching, documenting and implementing current and advanced topics on networking. (BSCISN PLO6)	2440:490 Senior Networking Projects	Project and associated documentation.	It is expected that about 80% of the students attain a score of 70% or higher on the final project and associated documentation.

BS CIS - Networking Course Prerequisite Mapping

BS CIS – Programming Assessment Plan

Program Learning Outcomes	Assessed Course	Measurement Tool	Expectation
1. Apply logical thinking and problem solving skills to effectively solve business problems using information technology. (BSCISP PLO1)	2440:121 Intro to Logic/Programming	Combination of lab assignments and exams.	It is expected that about 50% of the students attain a score of 73% or higher on a combination of labs assignments and exams.
2. Write, test and maintain computer programs using at least two programming languages. (BSCISP PLO2)	2440:160 Java Programming	Combination of tests, lab exercises, and a final project.	It is expected that about 70% of the students will attain a score of 73% or higher on the combination of tests, lab exercises, and a final project.
	2440:170 Visual Basic	Combination of two tests.	It is expected that about 70% of the students attain a score of 73% or higher on two tests.
	2440:256 C++ Programming	Combination of two tests.	It is expected that about 70% of the students attain a score of 73% or higher on two tests.
3. Effectively utilize database and database management systems to organize, store and retrieve data for use by application software and websites. (BSCISP PLO3)	2440:180 Intro to Database Management	Final exam	It is expected that about 70% of the students will attain a score of 73% or higher on the final exam.
4. Analyze information technology needs to design, develop, test and maintain computer application software or systems. (BSCISP PLO4)	2440:241 Systems Analysis and Design	Combination of two tests.	It is expected that about 70% of the students attain a score of 73% or higher on two tests.
5. Demonstrate interpersonal skills by working as an effective team member to solve business problems. (BSCISP PLO5)	2440:240 CIS Internship	Supervisor evaluations.	It is expected that 80% of students will earn a 90% or higher on supervisor evaluation.
6. Implement legal and ethical decision-making practices in information technology. (BSCISP PLO5)	2440:306 Ethics & Law in IT	Combination of two tests.	It is expected that about 70% of the students attain a score of 73% or higher on two tests.
7. Demonstrate comprehensive skill proficiency by developing software that comprehensively solves a business problem. (BSCISP PLO6)	2440:451 Senior Programming Projects	A final project.	It is expected that about 70% of the students attain a score of 73% or higher on the final project.

BS CIS - Programming Course Prerequisite Mapping