

**Program Outcomes (PROGRAM level)**

**MCC Career and Technical Education (CTE) Program: AAS Computer Science & Information Systems – CISCO, CCNP, Security, Software Development, Systems Administration & Engineering, Web Technologies**

**CTE or Occupational Program Outcome: *Use industry specific software and/or apply troubleshooting skills to solve problems.***

<b>Program Outcome Performance Indicator</b>	<b>Curriculum or Courses (Strategies)</b>	<b>Assessment Method(s)</b>	<b>Context for Assessment</b>	<b>Time of data collection</b>	<b>Assessment Coordinator</b>	<b>Evaluation of Results</b>
Designs and implements information technology solutions using appropriate software tools and techniques.	ART 102, CSIS 111, CSIS 123, CSIS 223, CSIS 128, CSIS 228, CSIS 141, CSIS 143, CSIS 151, CSIS 152, CSIS 161, CSIS 162, CSIS 172, CSIS 174, CSIS 175, CSIS 178, CSIS 262, CSIS 279, CSIS 290	Exams, projects, scoring rubrics	CSIS 111, CSIS 123, CSIS 223, CSIS 128, CSIS 228, CSIS 141, CSIS 143, CSIS 151, CSIS 152, CSIS 161, CSIS 162, CSIS 172, CSIS 174, CSIS 175, CSIS 178, CSIS 262, CSIS 279, CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee
Properly documents generated code to facilitate future maintenance.	CSIS 123, CSIS 223, CSIS 128, CSIS 228, CSIS 279	Exams, projects, scoring rubrics	CSIS 123, CSIS 223, CSIS 128, CSIS 228, CSIS 279	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee

**CTE or Occupational Program Outcome: Use industry specific software and/or apply troubleshooting skills to solve problems. (Cont.)**

<p>Implements and tests web solutions using appropriate software tools.</p>	<p>CSIS 128, CSIS 228, CSIS 162, CSIS 262, CSIS 279</p>	<p>Exams, projects, scoring rubrics</p>	<p>CSIS 128, CSIS 228, CSIS 162, CSIS 262 CSIS 279</p>	<p>Fall and Spring Semester</p>	<p>Program Coordinator</p>	<p>Program Coordinator, Faculty, &amp; Advisory Committee</p>
<p>Uses internetworking operating system software for router and switch configuration to control the flow of information through a network.</p>	<p>CSIS 112, CSIS 113, CSIS 172, CSIS 175, CSIS 212, CSIS 213, CSIS 216, CSIS 217, CSIS 218, CSIS 272</p>	<p>Standardized exams, teacher created exams, projects, scoring rubrics</p>	<p>CSIS 112, CSIS 113, CSIS 172, CSIS 175, CSIS 212, CSIS 213, CSIS 216, CSIS 217, CSIS 218, CSIS 272</p>	<p>Fall and Spring Semester</p>	<p>Program Coordinator</p>	<p>Program Coordinator, Faculty, &amp; Advisory Committee</p>
<p>Troubleshoots and repairs problems with information flow through a network.</p>	<p>CSIS 112, CSIS 113, CSIS 172, CSIS 175, CSIS 178, CSIS 212, CSIS 213, CSIS 216, CSIS 217, CSIS 218,</p>	<p>Standardized exams, teacher created exams, projects, scoring rubrics</p>	<p>CSIS 112, CSIS 113, CSIS 172, CSIS 175, CSIS 178, CSIS 212, CSIS 213, CSIS 216, CSIS 217,</p>	<p>Fall and Spring Semester</p>	<p>Program Coordinator</p>	<p>Program Coordinator, Faculty, &amp; Advisory Committee</p>

	CSIS 272		CSIS 218, CSIS 272			
<b>CTE or Occupational Program Outcome: <i>Use industry specific software and/or apply troubleshooting skills to solve problems. (Cont.)</i></b>						
Demonstrates the skills necessary to identify vulnerabilities in information systems and/or secure those systems.	CSIS 111, CSIS 170, CSIS 172, CSIS 175, CSIS 178	Standardized exams, teacher created exams, projects, scoring rubrics	CSIS 111, CSIS 170, CSIS 172, CSIS 175, CSIS 178	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee

**Results \_\_\_\_\_ (date):**

**Actions \_\_\_\_\_(date):**

**Second-Cycle Results \_\_\_\_\_(date):**

**Program Outcomes (PROGRAM level)**

**MCC Career and Technical Education (CTE) Program: AAS Computer Science & Information Systems – CISCO, CCNP, Security, Software Development, Systems Administration & Engineering, Web Technologies**

**CTE or Occupational Program Outcome: *Create and defend solutions to real life business challenges.***

<b>Program Outcome Performance Indicator</b>	<b>Curriculum or Courses (Strategies)</b>	<b>Assessment Method(s)</b>	<b>Context for Assessment</b>	<b>Time of data collection</b>	<b>Assessment Coordinator</b>	<b>Evaluation of Results</b>
Defines problem and its boundaries using both qualitative and quantitative methods.	MATH 110, CSIS 111, CSIS 110, CSIS 123, CSIS 223, CSIS 143 CSIS 141 or MATH 141	Exams, projects, scoring rubrics	CSIS 111, CSIS 123, CSIS 223, CSIS 143	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee
Applies safety/security, ethical, social, economic, and user requirements during the design phase.	CSIS 110, CSIS 111, CSIS 123, CSIS 223, CSIS 128, CSIS 228, CSIS 143, CSIS 151, CSIS 152 CSIS 162, CSIS 262,	Exams, projects, scoring rubrics	CSIS 111, CSIS 123, CSIS 223, CSIS 128, CSIS 228, CSIS 143, CSIS 151, CSIS 152, CSIS 162, CSIS 262	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee

***Create and defend solutions to real life business challenges. (Cont.)***

Prepares a plan of action to implement a system or project.	CSIS 111, CSIS 223, CSIS 228, CSIS 151, CSIS 152, CSIS 161, CSIS 170, CSIS 172, CSIS 175, CSIS 178, CSIS 279	Exams, projects, scoring rubrics	CSIS 111, CSIS 223, CSIS 228, CSIS 151, CSIS 152, CSIS 161, CSIS 170, CSIS 172, CSIS 175, CSIS 178, CSIS 279	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee
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**Results \_\_\_\_\_ (date):**

**Actions \_\_\_\_\_(date):**

**Second-Cycle Results \_\_\_\_\_(date):**

### Program Outcomes (PROGRAM level)

**MCC Career and Technical Education (CTE) Program: AAS Computer Science & Information Systems – CISCO, CCNP, Security, Software Development, Systems Administration & Engineering, Web Technologies**

**CTE or Occupational Program Outcome: *Demonstrate professional oral and written communication skills.***

<b>Program Outcome Performance Indicator</b>	<b>Curriculum or Courses (Strategies)</b>	<b>Assessment Method(s)</b>	<b>Context for Assessment</b>	<b>Time of data collection</b>	<b>Assessment Coordinator</b>	<b>Evaluation of Results</b>
Creates business communications documents (letters, memos, etc) that are readily understood by others (clearly organized with correct grammar and spelling).	BSAD 221, CSIS 110, CSIS 115, CSIS 279, CSIS 290	Exams, projects, scoring rubrics	CSIS 110, CSIS 115, CSIS 279, CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee
Generates documentation organized in accordance with MLA/APA (or other) guidelines.	CSIS 115, CSIS 290	Exams, projects, scoring rubrics	CSIS 115, CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee
Demonstrates an understanding of the needs of the audience by using appropriate delivery method, vocabulary and expression.	SPDR 100 CSIS 290	Exams, projects, scoring rubrics	CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee

**CTE or Occupational Program Outcome: *Demonstrate professional oral and written communication skills. (Cont.)***

Utilizes technological presentation tools (such as PowerPoint) in an effective manner.	CSIS 115	Exams, projects, scoring rubrics	CSIS 115	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee
Communicates clearly and professionally when interviewed.	CSIS 290	Exams, projects, scoring rubrics	CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee

**Results \_\_\_\_\_ (date):**

**Actions \_\_\_\_\_(date):**

**Second-Cycle Results \_\_\_\_\_(date):**

**Program Outcomes (PROGRAM level)**

**MCC Career and Technical Education (CTE) Program: AAS Computer Science & Information Systems – CISCO, CCNP, Security, Software Development, Systems Administration & Engineering, Web Technologies**

**CTE or Occupational Program Outcome: *Work effectively in a team environment.***

<b>Program Outcome Performance Indicator</b>	<b>Curriculum or Courses (Strategies)</b>	<b>Assessment Method(s)</b>	<b>Context for Assessment</b>	<b>Time of data collection</b>	<b>Assessment Coordinator</b>	<b>Evaluation of Results</b>
Communicates clearly with other team members using oral and written communications.	SPDR 100, ENGL 101, BSAD 221 CSIS 112, CSIS 113, CSIS 212, CSIS 213, CSIS 216, CSIS 217, CSIS 218, CSIS 272, CSIS 279, CSIS 290	Exams, projects, scoring rubrics	CSIS 112, CSIS 113, CSIS 212, CSIS 213, CSIS 216, CSIS 217, CSIS 218, CSIS 272, CSIS 279, CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee
Performs assigned role in team effectively.	BSAD 120 CSIS 112, CSIS 113, CSIS 212, CSIS 213, CSIS 216, CSIS 217, CSIS 218, CSIS 272, CSIS 279 CSIS 290	Exams, projects, scoring rubrics	CSIS 112, CSIS 113, CSIS 212, CSIS 213, CSIS 216, CSIS 217, CSIS 218, CSIS 272, CSIS 279, CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee



**CTE or Occupational Program Outcome: *Work effectively in a team environment. (Cont.)***

Utilizes leadership and project management skills to facilitate team activity.	BSAD 120, CSIS 110, CSIS 112, CSIS 113, CSIS 212, CSIS 213, CSIS 216, CSIS 217, CSIS 218, CSIS 272, CSIS 290	Exams, projects, scoring rubrics	CSIS 110, CSIS 112, CSIS 113, CSIS 212, CSIS 213, CSIS 216, CSIS 217, CSIS 218, CSIS 272, CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee
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**Results \_\_\_\_\_ (date):**

**Actions \_\_\_\_\_(date):**

**Second-Cycle Results \_\_\_\_\_(date):**

**Program Outcomes (PROGRAM level)**

**MCC Career and Technical Education (CTE) Program: AAS Computer Science & Information Systems – CISCO, CCNP, Security, Software Development, Systems Administration & Engineering, Web Technologies**

**CTE or Occupational Program Outcome: *Recognize the need for continued professional development.***

<b>Program Outcome Performance Indicator</b>	<b>Curriculum or Courses (Strategies)</b>	<b>Assessment Method(s)</b>	<b>Context for Assessment</b>	<b>Time of data collection</b>	<b>Assessment Coordinator</b>	<b>Evaluation of Results</b>
Uses resource materials (libraries, Internet, professional publications, databases) effectively.	CSIS 110, CSIS 115, ENGL 101, CSIS 290	Exams, projects, scoring rubrics	CSIS 110, CSIS 115, CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee
Demonstrates knowledge of professional society roles and benefits.	CSIS 290	Exams, projects, scoring rubrics	CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee
Recognizes limits of capabilities and seeks additional information when needed.	CSIS 111, CSIS 161, CSIS 223, CSIS 228, CSIS 262, CSIS 279, CSIS 290	Exams, projects, scoring rubrics	CSIS 111, CSIS 161, CSIS 223, CSIS 228, CSIS 262, CSIS 279, CSIS 290	Fall and Spring Semester	Program Coordinator	Program Coordinator, Faculty, & Advisory Committee

**Results \_\_\_\_\_ (date):**

**Actions \_\_\_\_\_(date):**

**Second-Cycle Results \_\_\_\_\_(date):**