Washtenaw Community College Comprehensive Report

CST 275 Computer Forensics II
Effective Term: Winter 2018

Course Cover

Division: Business and Computer Technologies
Department: Computer Instruction
Discipline: Computer Systems Technology
Course Number: 275
Org Number: 13400
Full Course Title: Computer Forensics II
Transcript Title: Computer Forensics II
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Course Change
Change Information:
Consultation with all departments affected by this course is required.
Course description
Pre-requisite, co-requisite, or enrollment restrictions
Outcomes/Assessment
Objectives/Evaluation
Rationale: Update course description to reflect current need, tools and techniques used in industry.
Proposed Start Semester: Winter 2018
Course Description: In this course, students learn new skills to apply to real and lab-produced hypothetical cases. Hands-on exercises guide discussions and reinforce the subject matter. Students will learn advanced techniques used to obtain and analyze digital information for use as evidence in civil or criminal cases. Topics may include analysis of volume and file system or of specific evidence data including registry and Internet artifacts, deleted data, thumb files, shadow files and reparse points. Students will enhance their understanding of the Forensics Tool Kit Suite. This course helps prepare students to sit for the AccessData ACE certification test. This course contains material previously taught in CSS 275. The title of this course was previously Data Recovery and Forensics.

Course Credit Hours

Variable hours: No
Credits: 4
Lecture Hours: Instructor: 60 **Student:** 60
Lab: Instructor: 0 **Student:** 0
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 60 **Student:** 60
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

Prerequisite
CNT 201 minimum grade "C"
and
Prerequisite
CST 270 minimum grade "C+"

General Education

General Education Area 7 - Computer and Information Literacy
Assoc in Arts - Comp Lit
Assoc in Applied Sci - Comp Lit
Assoc in Science - Comp Lit

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Analyze a case image file for evidence of potential illegal activity.
   Assessment 1
   Assessment Tool: Checklist
   Assessment Date: Winter 2018
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All courses
   Number students to be assessed: All students
   How the assessment will be scored: Checklist
   Standard of success to be used for this assessment: 75% of students will score a minimum of 75%.
   Who will score and analyze the data: Departmental faculty

2. Extract information and data from deleted files.
   Assessment 1
   Assessment Tool: Checklist
   Assessment Date: Winter 2018
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All course sections
   Number students to be assessed: All students in the class
   How the assessment will be scored: Checklist
   Standard of success to be used for this assessment: 75% of all students will score a minimum of 75% on the checklist.
   Who will score and analyze the data: Departmental faculty

3. Recover information and data from encrypted files.
   Assessment 1
   Assessment Tool: Checklist
   Assessment Date: Winter 2018
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All students
   How the assessment will be scored: Checklist
   Standard of success to be used for this assessment: 75% of all students will score 75% or greater on the departmental checklist.
   Who will score and analyze the data: Departmental faculty

4. Demonstrate file recovery and reconstruction using recognized forensic analysis tools in a digital environment.

Assessment 1

Assessment Tool: Checklist
Assessment Date: Winter 2018
Assessment Cycle: Every Three Years
Course section(s)/other population: All sections
Number students to be assessed: All students
How the assessment will be scored: Checklist
Standard of success to be used for this assessment: 75% of all students will score 75% or greater.
Who will score and analyze the data: Departmental faculty

Course Objectives

1. Acquire and analyze various types of files of varying complexity and content.
2. Recover deleted or corrupted files.
3. Reconstruct deleted or corrupted files.
4. Provide a documented deliverable for selected case image files.
5. Demonstrate how to acquire volatile information from computer devices.
6. Identify anti-forensics tools and techniques used to create and recover encrypted files.
7. Analyze critical system files, including the Registry, for potential evidence of criminal activity.
8. Demonstrate increased proficiency in computer and digital forensics research skills.
9. Identify the cyber-crime professional licensing requirements for this profession.
10. Demonstrate effective evidence handling procedures.
11. Identify potential illegal activity from disk usage.

New Resources for Course

Forensic Write Blocker, by Digital Intelligence

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Level III classroom
Other: Computers equipped with removable hard drives.

Reviewer	Action	Date
Faculty Preparer:		
James Lewis	*Faculty Preparer*	*Feb 09, 2017*
Department Chair/Area Director:		
Philip Geyer	*Recommend Approval*	*Feb 27, 2017*
Dean:		
Kimberly Hurns	*Recommend Approval*	*Feb 28, 2017*
Curriculum Committee Chair:		
David Wooten	*Recommend Approval*	*Mar 21, 2017*
Assessment Committee Chair:		
Ruth Walsh	*Recommend Approval*	*Mar 22, 2017*
Vice President for Instruction:		

Kimberly Hurns	*Approve*	*Mar 23, 2017*