

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: ~~CVCFC~~ **CVDRAA** Program Name: Data Recovery and Analysis

Effective Term: Fall 2009

Division Code: BCT Department: CIS

Directions:

1. Attach the current program listing from the WCC catalog or Web site and indicate any changes to be made.
2. Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.
3. Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using a Master Syllabus form, but should be submitted at the same time as the program change form.

Requested Changes:

- | | |
|---|---|
| <input type="checkbox"/> Review | <input type="checkbox"/> Program admission requirements |
| <input type="checkbox"/> Remove course(s): _____ | <input type="checkbox"/> Continuing eligibility requirements |
| <input type="checkbox"/> Add course(s): _____ | <input type="checkbox"/> Program outcomes |
| <input checked="" type="checkbox"/> Program title (title was <u>Computer Forensics Adv. Cert.</u>) | <input type="checkbox"/> Accreditation information |
| <input checked="" type="checkbox"/> Description | <input type="checkbox"/> Discontinuation (attach program discontinuation plan that includes transition of students and timetable for phasing out courses) |
| <input type="checkbox"/> Type of award | <input type="checkbox"/> Other _____ |
| <input checked="" type="checkbox"/> Advisors | |
| <input type="checkbox"/> Articulation information | |

Show all changes on the attached page from the catalog.

Rationale for proposed changes or discontinuation:

The program title is being changed from Computer Forensics Adv. Cert. to Data Recovery and Analysis Adv. Cert. in response to new licensing requirements for Computer Forensics practitioners. The course titles of the Data Recovery Advanced Certificate are being changed to better reflect the sequencing of courses in the Computer Forensics and Computer Security programs. Additionally, ²³⁴CS 240 is being shortened to 2 credits from 3 credits. The program description is being changed to emphasize the need for prior professional experience or coursework in computer hardware, and to better define the target market for this curriculum.

Financial/staffing/equipment/space implications:

No new investment in staffing, equipment or space is required.

List departments that have been consulted regarding their use of this program.

ELE and CIS

Signatures:

Reviewer	Print Name	Signature	Date
Initiator	James Lewis	<i>[Signature]</i>	3/2/09
Department Chair	Clarence Hasselbach	<i>[Signature]</i>	3/3/09
Division Dean/Administrator	Rosemary Wilson	<i>[Signature]</i>	3/4/09
Vice President for Instruction		<i>[Signature]</i>	3/25/09
President			

Do not write in shaded area. Entered in: Banner - C&A Database 4/10 Log File 3/5/09 Board Approval 4/10/09

Please submit completed form to the Office of Curriculum and Assessment and email an electronic copy to sjohn@wccnet.edu for posting on the website.

Program Information Report

School of Information Technology

The School of Information Technology gathers the diverse areas that make up the computer technology of today. From basic programming languages to systems development through networking, these programs provide the core of information technology. Develop skills in computer forensics or learn how to run a successful e-business, the growing field of applied information technology is waiting for you.

Washtenaw Community College offers programs at several levels for students who want to begin new careers, or advance in their existing careers. The first level is the certificate, which can vary from nine to thirty-six credits, depending on the field. Certificates generally prepare students for entry-level jobs.

After completing a certificate, students can progress to the next level, the advanced certificate. The credit hours required for these programs also vary. This type of certificate provides a more specialized level of skill development, and often allows students to upgrade their positions at their places of employment.

The next level, an Associate in Applied Science, is available for some programs. For some career fields, it is possible to earn a certificate, advanced certificate, and an Associate in Applied Science degree in the same field. In these cases, the credit hours from the certificate and advanced certificate can be applied to the credit hours needed for the Associate in Applied Science degree.

Alternatively, students can earn an AAS in Occupational Studies by completing a certificate, advanced certificate and General Education requirements.

Computer Security and Forensics

Become part of the growing field of computer system security and forensics.

Data Recovery and Analysis (CVDRAA)

Advanced Certificate

Program Effective Term: Fall 2009

This certificate program is intended for individuals in IT settings in business and industry who need to know how to respond to incidents requiring the preservation and evaluation of electronic evidence. Students will learn current techniques in data preservation, identification, and extraction from Linux, FAT, and NTFS file systems and will perform forensic analysis of systems using popular examination tool kits. Students will also learn common practices involved in forensic investigations and evidence handling, and will become informed in federal and state privacy, intellectual property, search and seizure, and cyber-crime laws.

Important Note: Students should be able to pass a criminal background check before entering this program. In order to practice computer forensics in the State of Michigan, individuals must be licensed as private investigators or qualify for an exemption under statutes pertaining to the licensure of private investigators.

Articulation:

Eastern Michigan University, several BS degrees.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: <http://www.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges>.

Program Admission Requirements:

Completion of the Foundations of Computer Security Certificate program (Data Recovery and Analysis option). Exceptions may be allowed upon consultation with a program advisor and a showing of relevant prior professional and/or academic experience.

Continuing Eligibility Requirements:

Students must maintain a grade of "C" or better in the program requirements.

Major/Area Requirements		(13 credits)
CJT 208	Criminal Evidence and Procedure	3
CSS 270	Computer Security VII	4
CSS 272	Computer Security VIII	2
CSS 275	Computer Security IX	4

Minimum Credits Required for the Program:

13

Notes:

Notes

I	II	III
CJT 208	CSS 270	CSS 272
		CSS 275

CVCCE

PROGRAM PROPOSAL FORM

- ☐ **Preliminary Approval** – Check here when using this form for preliminary approval of a program proposal, and respond to the items in general terms.
- ☒ **Final Approval** – Check here when completing this form after the Vice President of Instruction has given preliminary approval to a program proposal. For final approval, complete information must be provided for each item.

Program Name: Division and Department: Type of Award: Effective Term/Year: Initiator:	<u>Computer Forensics</u> <u>BCT, CISD</u> <input type="checkbox"/> AA <input type="checkbox"/> AS <input type="checkbox"/> AAS <input type="checkbox"/> Cert. <input checked="" type="checkbox"/> Adv. Cert. <input type="checkbox"/> Post-Assoc. Cert. <input type="checkbox"/> Cert. of Comp. <u>200409</u> <u>James Lewis</u>		Program Code: CIP Code:
Identify Program Features Program's purpose and its goals. Criteria for entry into the program, along with projected enrollment figures. Connection to other WCC programs, as well as accrediting agencies or professional organizations. Special features of the program.	<p>The college and six partner institutions in five Midwestern states were recently awarded a 2.9 million dollar NSF grant to establish the Center for Systems Security and Information Assurance (CSSIA). The CSSIA consortium has as its principle charge the responsibility of developing a standard computer security curriculum for two and four year institutions.</p> <p>The within advanced certificate program is being proposed for WCC students, and will also serve as a template for eventual adoption by the remaining institutions of CSSIA. The degree will be the basis for an articulation agreement with four year institutions such as the University of Illinois, Springfield, with Walsh College, and possibly with Eastern Michigan University.</p>		
Need Need for the program with evidence to support the stated need.	<p>A substantial increase in job opportunities for Computer Security Security professionals is predicted for the next several years. Predictions are based upon such factors as salary trends and vacancy rates:</p> <p>-Base pay for corporate security jobs grew 3.1% over the period of from September 2001 to August 2002 in one study. See Foote, "Info Security Job Boom Inevitable", ComputerWorld.com Septebmer 02, 2002. See also Melymuka, "Just how hot are IT security jobs?", ComputerWorld.com, October 28, 2002</p> <p>-Vacancy rates of security professionals have been reported as high as 90% in a study conducted in 2001 before the 9/11 incident. Foote, "Companies Need Security Pros With More Varied Skills", ComputerWorld.com, July 09, 2001.</p> <p>According to one source, an aggressive hiring trend for security professionals began during Fall of 2003. See McMahon, Steve "ROI, Security Driving IT Employment Trends" Datamation, itmanagement.earthweb.com/career/article.php/2221691, June 13, 2003.</p>		
Program Outcomes/Assessment State the knowledge to be gained, skills to be learned, and attitudes to be developed by students in the program. Include assessment methods that will be used to determine the effectiveness of the program.	Outcomes 1. Students will be able to perform forensic analysis of computer systems and harddrives and manage forensic investigation from evidence preservation to assistance with criminal investigation.	Assessment method 1. Students' performance on industry certification exams will be followed. Pertinent certifications include: Encase Certified Examiner (EnCE), and GIAC Certified Forensic Analyst (GCFA). <p style="text-align: center;">Processed . . .</p> <p style="text-align: center;">MAY 06 2004</p>	

Office of Curriculum & Articulation Services

22119

Curriculum	Semester	Course ID	Title	Credits	Pre/Coreqs
<p>Courses.</p> <p>Note: Prerequisites to courses must be included as program admission requirements, or listed as a requirement within the program.</p>	Semester 1	CJT 22108 CSS 240	Criminal Justice Hi Tech Cri	3 3	
	Semester 2	CSS 270 CSS 275	Forensics I Forensics II	4 4	CSS 205 CSS 270
	Semester 3				
	Semester 4				
<p>Budget</p> <p>Specify program costs in the following areas, per academic year:</p> <ul style="list-style-type: none"> Faculty Training/travel Materials/resources Facilities/equipment Other 	<p>Start-up costs Grant budget attached.</p> <p>Ongoing costs Grant budget attached.</p>				
<p>Program Information</p>	<p>Accreditation/Licensure – Checkpoint, CISSP, CCSP, GIAC, Security +</p> <p>Advisors – James Lewis, Philip Geyer, Mike Galea, John Trame</p> <p>Advisory Committee – External members include, not limited to: Frank Carlesimo U of M, Ron Murphree Network Two, Terry Weadock Dominant Systems</p> <p>Admission requirements – Successful completion of Data Assurance Certificate or equivalent experience with permission of program advisor.</p> <p>Articulation agreements – University of Illinois, Springfield. Walsh College. Ft. Hayes University. Possible Eastern Michigan University</p> <p>Continuing eligibility requirements – Grade of C or better in program requirements</p>				

Reviewer	Print Name	Signature	Date
Department Chair/Area Director	Philip Geyer	<i>Philip Geyer by Neil Linder</i>	2-20-04

Dean	Rosemary Wilson	<i>Rosemary Wilson</i>	02-20-04	<i>RM</i>
Vice President of Instruction <input type="checkbox"/> Approved for Development <input checked="" type="checkbox"/> Final Approval	Roger Palay	<i>Roger M. Palay</i>	3/23/04	
President	Larry Whitworth	<i>Larry Whitworth</i>	4/12/04	
Board Approval			4/27/04	

4/28 process log

Computer Forensics (CVCFC)

Advanced Certificate

Program Effective Term: Fall 2004

This certificate program is designed to meet the demand in business and industry for computer security professionals who are trained in computer forensics. Students will learn current techniques in data preservation, identification, and extraction from Linux, FAT, and NTFS file systems and will perform forensic analysis of systems using popular examination toolkits. Students will also learn common practices involved in forensic investigations and evidence handling, and will become informed in federal and state privacy, intellectual property, search and seizure, and cyber-crime laws.

Program Admission Requirements:

Completion of the Data Assurance certificate program or students must have equivalent knowledge.

Continuing Eligibility Requirements:

Students must maintain a grade of "C" or better in the program requirements.

Major/Area Requirements		(14 credits)
CJT 208	Criminal Evidence and Procedure	3
CSS 240	High-Technology Crime	3
CSS 270	Computer Forensics I	4
CSS 275	Computer Forensics II	4

Minimum Credits Required for the Program: 14