Program Information Report

Science, Computer Technology, Engineering & Math

Computer Networking Operating Systems (CVCNOR)
Advanced Certificate
Program Effective Term: Fall 2022

High Demand Occupation   High Skill Occupation   High Wage Occupation

This program lays a foundation in preparation for a profession as a Microsoft Certified IT Professional. Students will install, configure, and troubleshoot Microsoft Client Server Networks. The program is designed to deploy and manage both Windows Server and Client Workstations in simulated real-life situations. Administering, managing, monitoring, and troubleshooting of Server Active Directory, Network Services, and other Server functions are all emphasized. All Server configured activities are tested out using Client Workstations to ensure they work, just as in a real business environment. The program is structured for those who are working towards Microsoft Server certifications. Also those already having certification who want to enhance their knowledge with the newer operating systems, as well as those who may just want to learn how to effectively implement these technologies are welcome.

Program Admission Requirements:
Completion of the Computer Systems Technology Program (CTCSTC) or CST 160 and CST 185 with a minimum grade of "C," passing the COMPTIA certification, or equivalent industry experience.

Major/Area Requirements		(15 credits)
CNT 201	Administering Microsoft Windows Client Operating Systems	3
CNT 211	Installation, Storage, and Compute - Windows Server	4
CNT 223	Networking with Windows Server	4
CNT 224	Identity with Windows Server	4

Minimum Credits Required for the Program: 15

Notes:

This program is designed to be completed in a two semester time frame.

WASHTENAW COMMUNITY COLLEGE

PROGRAM CHANGE FORM

Program Code: CVCNO	Current Program Name: Computer Networking Operating Systems 1	Effective Term: SS 2022
Division Code: BCT	Department: CSIT	

Directions:

1. Attach the current program listing from the WCC catalog or website 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 CurricUNET, but should be submitted at the same time as the program change form.

4. If changes affect the program assessment plan or if program outcomes are updated, please submit a Program Assessment Plan Change form. These changes must be approved separately from the program change form and should be submitted at the same time. Current program assessment plans can be found on the Curriculum and Assessment Program Information page.

Requested Changes:

☐ Remove course(s): _____
☐ Add course(s): _____
☒ Program title (new title is <u>Computer Networking Operating Systems</u>)
☒ Description
☐ Advisors
☒ Program admission requirements
☐ Continuing eligibility requirements

Show all changes on the <mark>catalog page you attach.</mark>

* Please submit a Program Assessment Plan Change form.

☐ Program outcomes (may also result from removing or adding a course)*
☐ Program assessment plan*
☐ Accreditation information
☐ Other _____

Note: A change to the Award Type requires the submission of a new program proposal form and a separate program inactivation form. Contact the Director of Curriculum & Assessment for more information.

Rationale for proposed changes:

Remove the number 1 from the program title. We no longer offer the Computer Networking Operating Systems 2 advanced certificate. Therefore, there is no need for this program to imply that it is the first certificate program in a series of program certificates.

Financial/staffing/equipment/space implications:

None

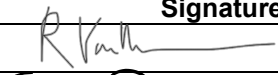**List departments that have been consulted regarding their use of this program.**
This only affects our department.

Signatures:

Reviewer	Print Name	Signature	Date
Initiator	John Trame	*signature*	1/27/2022
Department Chair	Scott Shaper	*signature*	1/28/2022
Division Dean/Administrator	Kim Samuek	*signature*	1/28/2022

Please return completed form to the Office of Curriculum & Assessment, SC 257 or by e-mail to curriculum.assessment@wccnet.edu

PROGRAM CHANGE FORM

Once reviewed by the appropriate faculty committees we will secure the signature of the VPI and President.			
Reviewer	**Print Name**	**Signature**	**Date**
Curriculum Committee Chair	Randy Van Wagnen		3-1-22
Assessment Committee Chair	Shawn Deron		3/03/2022
Vice President for Instruction	Kimberly Hurns		

Reviewed by C&A Committees 2/17/22

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code
CVCNO

Program Name: Computer Networking Operating Systems I

Effective Term:
FALL 2009

Division Code: *BCT* **Department:** Business

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:

☐ Review
☒ Remove course(s): *CNT 221* *R̂M.P.*
☒ Add course(s): CNT223
☐ Program title (title was _____)
☒ Description
☐ Type of award
☒ Advisors *LISTED ON WEB*
☐ Articulation information

☐ Program admission requirements
☐ Continuing eligibility requirements
☐ Program outcomes
☐ Accreditation information
☐ Discontinuation (attach program discontinuation plan that includes transition of students and timetable for phasing out courses)
☒ Other *DEPARTMENTS LISTED ON WEB*

Show all changes on the <u>attached page from the catalog</u>.

Rationale for proposed changes or discontinuation: Beginning with Server 2008's introduction, Microsoft has completely changed the Certification Requirements for IT personnel involved with their Server products. In contrast with the 4 – Step process with the Server 2003 MCSA (Microsoft Certified System Administrator), the new program requires two MCTS (Microsoft Certified Technology Specialist) exams and one MCITP (Microsoft Certified Information Technology Professional) resulting in the new MCITP Server Enterprise Certification. Our present CNT211 course, Server Management, which is already largely Active Directory based, will be altered slightly to meet one of the MCTS requirements, "Configuring Windows Server 2008 Active Directory". The present CNT224 course will be also be altered to meet the MCITP requirement – Windows Server 2008 Administration. A new course CNT223, (Configuring Windows Server 2008 Network Infrastructure), will replace CNT221. This course contains the same elements from CNT221, but adds considerable additional material previously covered in the existing CNT211 and CNT224 courses which Microsoft now covers in the Network Infrastructure venue. The fourth course presently in this program, XP Administration, will not be changed to Vista, but will be altered at the time of Introduction of "Windows 7" next year. This is in line with present business practices, as most organizations have opted to stay with Windows XP because of problems and complexity involved with the switch to VISTA, and the relatively short time frame for its replacement.

Financial/staffing/equipment/space implications:
No Financial, staffing, or space implications. Possibly some additional equipment purchases which will be handled within the Department's budget.

List departments that have been consulted regarding their use of this program.
These changes could impact both CIS and CSS programs. This proposed change has been given to Neil Gudsen, who represents the CIS/CSS programs.

Signatures:

Reviewer	Print Name	Signature	Date
Initiator	William Reichert	_(signature)_	11/20/08
Department Chair	Gary Downey	Gary Downey	11/25/08
Division Dean/Administrator	Rosemary Wilson	_(signature)_	11/25/08
Vice President for Instruction		Roger M. Palay	1/23/09
President			

Do not write in shaded area. Entered in: Banner ___1/28___ C&A Database ___1/28___ Log File ___1/28/09___ Board Approval _____

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.

logged 11/26/08 s/l

Computer Networking Academy I (CVCNA1)

Advanced Certificate

Major/Area Requirements (16 credits)

CNT 206	Internetworking I - Fundamentals	4
CNT 216	Internetworking II - Routers	4
CNT 226	Internetworking III - Switches	4
CNT 236	Internetworking IV - WANs	4

Minimum Credits Required for the Program: 16

Computer Networking Academy I (CVCNA1)
This Cisco Networking Academy program prepares students for a job as a network technician where they will install, configure, and troubleshoot Local Area Networks under the supervision of a network administrator. The focus is placed on cabling systems and internetworking hardware. It also gives students the knowledge they'll need to pass the Cisco Certified Network Associate Examination.

Program Admission Requirements: Students must complete the Computer Systems Technology (CTCSTC) Certificate with a GPA of 2.0 or better or have equivalent industry experience to be admitted into the program.

Computer Networking Operating Systems I (CVCNO)

Advanced Certificate

Major/Area Requirements (14 credits)

CNT 201	Administering Microsoft Windows XP Professional	3
CNT 211	Administering and Managing Microsoft Windows Server	4
CNT 221 **OR**	Implementing a Windows Server 2003 Network Infrastructure	3
CNT 224	Microsoft ISA Administration	4

Or **CNT223 Configuring Windows Server 2008 Network Infrastructure** 4   14
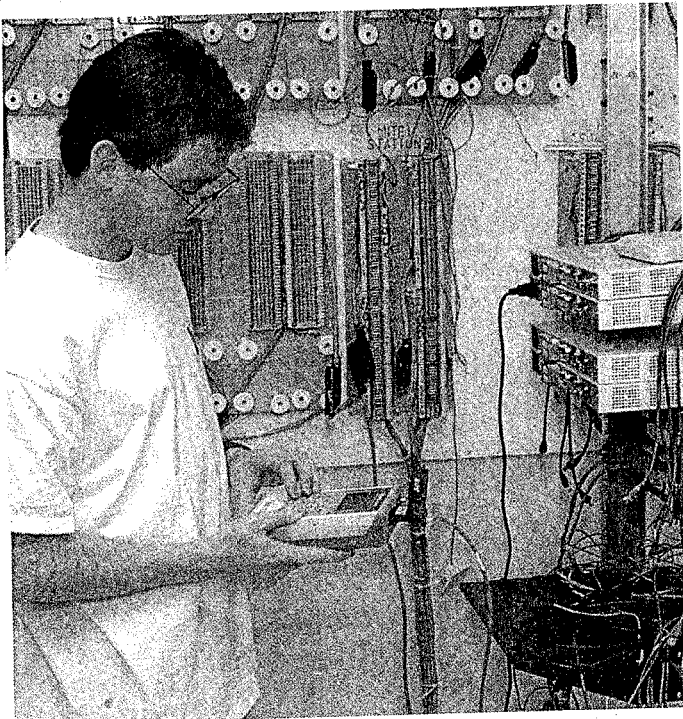**Minimum Credits Required for the Program:**

Notes:
This program is designed to be completed in a two semester time frame.

Computer Networking Operating Systems I (CVCNO)
This program lays a foundation in preparation for a profession as a Microsoft Certified IT Professional. Students will install, configure, and troubleshoot Microsoft Client Server Networks. The program is designed to deploy and manage both Windows Server 2003 and Server 2008 with XP Client Workstations in simulated real-life situations. Administering, managing, monitoring, and troubleshooting of Server 2008 Active Directory, Network Services, and other Server functions are all emphasized. All Server configured activities are tested out using Client Workstations to insure they work, just as in a real business environment. The program is structured for both those who are working towards Microsoft Server 2003 MCSA/MCSE certifications, and/or Server 2008 MCTS/MCITP certifications. Also those already having certification who want to enhance their knowledge with the newer operating systems, as well as those who may just want to learn how to effectively implement these technologies are welcome.

Computer Networking Operating Systems I (CVCNO)
Advanced Certificate

Contact Information:
Division: Business and Computer Technologies
School: School of Information Technology
Department: Computer Instruction and Electricity/Electronics
Advisors: Michael Galea, James Lewis, William Reichert, John Trame

first if possible

Major/Area Requirements			(14 Credits)
CNT 201		Administering Microsoft Windows XP Professional	3
CNT 211		Administering and Managing Microsoft Windows Server	4
CNT 221	or	Implementing a Windows Server 2003 Network Infrastructure	
CNT 223		Windows Server Networking Infrastructure Configuration	3-4
CNT 224		Microsoft ISA Administration	4

Minimum Credits Required for the Program: **14 Credits**

Underlined text above is new.

Program Description:

This program lays the foundation in preparation for a professional as a Microsoft Certified IT Professional. Students will install, configure, and troubleshoot Microsoft Client Server Networks. The program is designed to deploy and manage both Windows Server 2003 and Server 2008 with XP Client Workstations in simulated real-life situations. Administering, managing, monitoring, and troubleshooting of Server 2008 Active Directory, Network Services, and other Server functions are all emphasized. All Server configured activities are tested out using Client Workstations to insure they work, just as in a real business environment. The program is structured for both those who are working towards Microsoft Server 2003 MCSA/MCSE certifications, and/or Server 2008 MCTS/MCITP certifications. Also, those already having certification who want to enhance their knowledge with the newer operating systems, as well as those who may just want to learn how to effectively implement these technologies are welcome.

PROGRAM CHANGE FORM

Program Code: CVCNO~~X~~

Program Name: **Computer Networking Operating Systems I**

Effective Term: **Fall 2004**

Directions:
1.) Attach the current program listing from the WCC catalog and indicate any changes that you would like to make.

2.) Draw lines through anything that should be deleted and write in additions. Extensive narrative changes may be included on a separate sheet.

3.) Check the boxes below for each type of change being proposed. If you are making changes to courses or proposing new courses as part of this proposal, they must be approved separately using a Course-Syllabus Approval Form (CSAF). Courses that are being discontinued also should be submitted on CSAF forms.

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1. Requested Changes:

☒ Remove _1_ Course(s)
☒ Add _21_ Course(s)
☐ Total Credits: Current Credits_____ After Changes _____
☐ Change Course Semester Sequencing
☐ Change Title (title was _____)
☒ Description

☐ Advisors
☐ Articulation Information
☐ Program Admission Requirements
☐ Continuing Eligibility Requirements
☐ Footnotes
☒ Other Elective Courses

Show all changes on the attached program sheet.

2. Rationale for Proposed Changes:

With the release of Windows XP Professional, and Windows Server 2003, Microsoft has changed their requirements for the MCSA certification. The changes reflect not only name changes to the operating systems, but the combining of two requirements "Administering Windows 2000 Server" with the "Managing Windows 2000 Server" into a single certification requirement, and adding an elective which can be chosen from five different areas. We will be offering a course in two of the five areas, choosing the most popular and useful of the possibilities - Internet and Acceleration Server, 2000, and Exchange 2003.

3. Financial/Staffing/Equipment/Space Implications:

Extensive revamp of course materials is required.

4. Has the department consulted with all departments that may be impacted?   Yes ☒   No ☐   NA ☐
Comments:

**REMINDER: Please include the current program sheet with all changes listed.

Signatures:

Reviewer	Print Name	Signature	Date
Program Change Initiator:	William R. Reichert		9/11/03
Department Chair:	GARY DOWNEN	Gary Downen	9/17/03
Division Dean/Administrator:	Rosemary Wilson		10/6/03
Executive Vice President, Instruction			1/29/04

*Please submit completed form to the Office of Curriculum and Articulation Services

mlbCurriculum Development\Forms\Program Forms\Program Change Form v2.3.doc/6/18/02
Access Program File___2/6___   Log ___2/6___   Copied and Returned _____
Copies: Initiator, Department Chair, Dean, Curriculum Files
New Listing to: Counseling; Admissions, Student Records

File Name: MCSAProgChange2.doc
MAY 03 2004

Computer Networking Operating Systems I (CVCNO)
Advanced Certificate

Program Effective Term: Fall 2004

This program lays a foundation in preparation for a profession as a Microsoft Certified Systems Administrator (MCSA) where you will install, configure, and troubleshoot Microsoft client-server networks. The program is designed to deploy and manage Windows 2003/XP components in real life situations. Installing, configuring, testing, managing, monitoring, and troubleshooting of the Windows 2003/XP systems are all emphasized. Most importantly, specific activities are tested out on workstations to insure they work just as in a real business environment. The program is for both those who are working towards Microsoft certifications i.e., MCSA, MCSE and those who may already have the certifications and want to learn how to implement these technologies. Individuals who have an interest in learning Windows 2003/XP technologies are also welcome.

Program Admission Requirements:

Completion of the Computer Systems Technology Program (CTCSTC) or (CST 150 and CST 225) with a minimum grade of "C", passing the COMPTIA certification, or equivalent industry experience is required for admission to the program.

Major/Area Requirements (14 credits)

CNT 201	Administering Microsoft Windows XP Professional	3
CNT 211	Administering and Managing Microsoft Windows 2003 Server	4
CNT 221	Implementing a Windows Server 2003 Network Infrastructure	3
CNT 224	Microsoft ISA Administration	4

Minimum Credits Required for the Program: 14

Notes:
*This program is designed to be completed in a two semester time frame.

**One course must be taken as part of the Computer Networking Operating Systems I program and the other course must be used with the Computer Networking Operating Systems II program.

Program Name: Computer Networking Operating Systems   **Effective Term:** Fall 02

Program Code:
CVCNO: _____

Attach the current program listing from the WCC catalog and indicate any changes that you would like to make. Draw lines through anything that should be removed and write in any additions. Extensive narrative changes may be included on a separate sheet. Check the boxes below for each type of change being proposed. If you are making changes to courses or proposing new courses (that don't currently exist) as part of this proposal, they must be approved separately using a Course-Syllabus Approval Form (CSAF).

1. Requested Changes:

☒ Remove <u>Four</u> Course(s)
☒ Add <u>One</u> Course(s)
☒ Increase/Decrease Total Credits: Current Credits <u>19</u> After Changes <u>14</u>
☐ Course Sequence
☒ Name (new name <u>Computer Networking Operating Systems I   </u>)
☒ Description

☐ Advisors
☐ Articulation Agreements
☐ Program Admission Requirements/Procedures
☐ Continuing Eligibility Requirements
☐ Footnotes
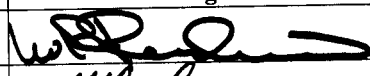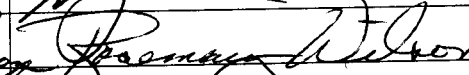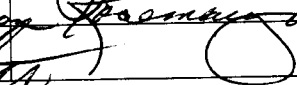☐ Other _____

Show all changes on the attached program sheet.

Rationale for Proposed Changes: The present certficate, which centers on the Microsoft MCSE, requires seven courses to complete. The MCSE is actually an advanced certification, which is comparable to the CISCO CCNP. The training for this CISCO certification is completed at WCC with two certificates, the first being the entry level CCNA, and the second, the more advanced CCNP. Having the seven courses in the first certificate has made the Microsoft program unattractive to potential students, particularly when they only have to take four CISCO courses for an equilvalent certificate. Microsoft, however, has given us a new entry level certification which is comparable to the CISCO CCNA and, like the CCNA, would require four courses to complete the training, three of which we are already teaching!!!! This certification is called the MCSA (Microsoft Certified Systems Administrator). Attached is a copy of the reworked program, with the required courses, deleting the three advanced ones and adding the new additional one. Along with these changes, a new program form for four additional courses for a 2nd Certificate in Microsoft, preparing the student for the MCSE after the MCSA (comparable to the CCNP after the CCNA).

3. Financial/Staffing/Equipment/Space Implications: At this time, I see no addition implications concerning Financial, Staff, Equipment, or Space, in fact, if anything, the needs would be reduced for this certificate as the number of courses being taught would be reduced. We presently are teaching all the MCSE courses in TI-114 in the Fall and Winter which has worked out very well.

4. Has the department consulted with all departments that may be impacted?   Yes ☒   No ☐   NA ☐

Comments: CIS and ELE Instructors and Department Heads have all been contacted with this proposal.

Signatures:

Reviewer	Print Name	Signature	Date
Program Change Initiator:	William R. Reichert		12/17/01
Department Chair:	Michael Galea		12/17/01
Division Dean:	Rosemary Wilson		12-29-02
VP, Instruction/Student Services:			2/4

Access Program File_____   Log _____   Copied and Returned _____
Copies: Initiator, Department Chair, Dean, Curriculum File   New Listing to: Counseling; Admissions
Curriculum and Articulation Services:
Curriculum Development\Forms\Programs\Program Change Form 1/9/01   Document Code: MCSA.doc

Computer Networking Operating Systems I (CVCNOS)
Advanced Certificate

Program Effective Term: Fall 2002

This program helps prepare you for a profession as a Microsoft MCSA (Microsoft Certified Systems Administrator) where you will install, configure, and troubleshoot Microsoft client-server networks. The program is designed to deploy and manage Windows 2000 components in real life situations. Installation, configuration, testing, management, monitoring, and troubleshooting of the Windows 2000 Systems are all emphasized. Most importantly, specific activities are tested out on Workstations to insure they work just as in a real business environment. The program is for both those who are working towards Microsoft certifications i.e. MCSA, MCSE and those who may already have the certifications and want to learn how to implement these technologies. Individuals who have an interest in learning Windows 2000 technologies are also welcome.

Business and Computer Technologies Division
Computer Instruction Department and Electronics Department

Advisors: Michael Galea, James Lewis, John Trame

Program Admission Requirements:
Completion of the Computer Systems Technology Program (CTCSTC) or (ELE 150 and ELE 225A) with a minimum grade of "C" or passing the COMPTIA certification.

Major/Area Requirements   (14 Credits)

CNT 201	Administering Microsoft Windows 2000 Professional	3
CNT 211	Administering Microsoft Windows 2000 Server	4
CNT 221	Implementing a Microsoft Windows Network Infrastructure	3
CNT 222	Mangaging a Microsoft Windows 2000 Network Environment	4

Minimum Credits Required for the Program: 14

Footnotes:
*This program is designed to be completed in a two semester time frame.

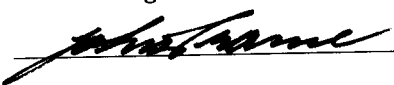## WASHTENAW COMMUNITY COLLEGE
PROGRAM APPROVAL DOCUMENT
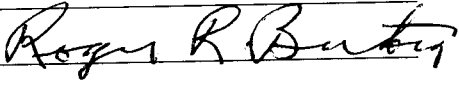
1. **Program Name:** Computer Network Operating Systems _____ **Program Code:** _____

2. **Division:** _____ 3. **Department:** _____ **CIP Code:** _____

4. **Type of Award:** ☐A.A. ☐A.S. ☐A.A.S. ☐Certificate of Completion ☐Certificate ☒Advanced Certificate ☐Post Associate Certificate

5. **Is this an occupational program eligible for Perkins Funding?** ☐yes ☐no 6. **Effective Term:** _____

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7. Program Description:
(Provide a succinct paragraph describing the program. Indicate program goals. List the jobs for which the students will be prepared. Give specifics about the career, e.g. special skills and knowledge required, certifications or licenses needed, transfer and long-term employment opportunities. Indicate the difference between the associate degree and certificate programs, if applicable.) Space will open as you type.

This program prepares you for a job as a network administrator, where you will install, configure, and troubleshoot Local Area Networks. The focus is placed on Microsoft servers and clients. It also gives you the knowledge you'll need to pass the Microsoft Certified Systems Engineer (MCSE) exams.

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8. Program Advisors: John Trame, Michael Galea, and Roland Meade

9. Admissions Criteria: (College level courses may not be used as admission requirements for programs, except for Advanced or Post-Associate Certificates.)	**10. Criteria for Continuing Program Eligibility:**
Successful completion of the Computer Systems Technology Certificate or equivalent industry experience.	

Approval Recommended:	Print Name	Signature	Date
Program Initiator:	John Trame	*[signature]*	2/15/2001
Dept. Chair/Director:		*Roger R Burton*	3/6/01
Dean/Administrator:			
Exec VP of Instruction:	Guy Altieri		
President:	Larry Whitworth		

Date of Board Approval: _____

A. CURRENT AND PROJECTED ENROLLMENT

1. Estimated Number of Students per Year

Year	Headcount (unduplicated)	Contact Hours
1999-2000		
2000-2001	~~40~~	
2001-2002	~~40~~ 50	7,200
~~2002-2003~~	50	

(handwritten margin notes: 20 x 4 4800; 20 x 2400; 7,200)

2. How long is this program expected to continue?

B. PROJECTED BUDGET

1. Start-up Costs

Expenditures	Amount
Salaries and Fringes for Development	$NA
Travel	$NA
Training Costs	$NA $600
Equipment Purchase/Lease	$NA
Facility Construction/Renovation	$NA
Other Direct Costs (specify) *software*	$NA $4000,
Total	$ 4,600

2. Ongoing Costs of Operation

Expenditures	Amount
Instructional Salaries and Fringes	$ ~~230.00~~
Aides and Paraprofessionals Salaries and Fringes	$
Instructional Travel and Advisory Committees	$
Instructional Supplies and Materials	$
Equipment Purchase/Lease	$
Other Direct Costs (specify)	$
Total	$

(handwritten margin notes: 80, 90, $40, 230)

3. Revenues

	Tuition	Fees	Local/State Funds	Federal Funds	Other Specify	Total
1999-00	$	$	$	$	$	$
2000-01	$	$	$	$	$	$

C. PERSONNEL

	Existing Faculty		New Faculty	
	Full-Time	Part-Time	Full-Time	Part-Time
Current year				
Next year	1.5	6		

D. NEEDS ASSESSMENT (Answer the following questions.)

1. Staff or firm that conducted the survey. _____ *ICARD* _____

2. Date study was conducted. _____

3. Geographic area to be served by the program (cities and counties)

   _____

4. Number of employers surveyed. _____

5. Number of skilled persons, in the geographical area, currently employed in the occupation for which the program could provide training.

	Full-Time Employees	Part-Time Employees
Currently employed		
Receiving On-the-Job Training		

6. Employment Opportunities in the local market area and the State of Michigan. (Projected number of full-time and part-time positions within one year and in five years)

	Local Area				Michigan			
	One Year		Five Years		One Year		Five Years	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Certificate Holders								
Degree Holders								
Limited Course Work								

7. Expected starting wage rate (excluding benefits):

   Certificate holders $_____   Associate Degree holders $_____

8. Student interest survey results indicating the number of students interested in pursuing this program area

   Total Number Surveyed _____

   Number interested in an associate degree _____

   Number interested in a certificate _____

   Number interested in limited coursework _____

9. List similar educational opportunities within the geographic area currently served by the college.

E. COURSE REQUIREMENTS AND SEMESTER SEQUENCE

1st Semester Courses			
Course	Title	Credit	Pre-requisites/Co-requisites
CNT 201	Managing Microsoft Workstations	2	*Completion of CSTC*
CNT 211	Administering Microsoft Networks	3	

2nd Semester Courses			
Course	Title	Credit	Pre-requisites/Co-requisites
CNT 221	• Implementing a Microsoft Windows Network Infrastructure	4	CNT 211
CNT 231	• Implementing a Microsoft Windows Directory Services Infrastructure	4	CNT 211

3rd Semester Courses			
Course	Title	Credit	Pre-requisites/Co-requisites
CNT 241	• Designing a Microsoft Windows Directory Services Infrastructure	2	CNT 231
CNT 251	• Designing Security for a Microsoft Network	4	CNT 231

4th Semester Courses			
Course	Title	Credit	Pre-requisites/Co-requisites
CNT 261	Designing a Microsoft Network Infrastructure	3	CNT 251

5th Semester Courses			
Course	Title	Credit	Pre-requisites/Co-requisites

6th Semester Courses			
Course	Title	Credit	Pre-requisites/Co-requisites
Credits Required to Complete the Program:			

F. **COURSE DESCRIPTIONS** (List the catalog descriptions for required specialty and support courses)

See the attached syllabi.

G. **ARTICULATION** (Briefly describe your plans to articulate the program with a similar program(s) offered by any secondary and/or four-year baccalaureate degree granting institution(s).

H. **PHYSICAL FACILITIES** (Describe the facilities in which the program will be housed. Specify whether the proposed program will require the construction of new physical facilities, renovation of existing facilities, or use of temporary facilities.)

BE 174 & BE 176

I. **ACCREDITATION/LICENSURE** (Describe the status of the application for recognition, accreditation, or licensing by external agencies, if applicable)

J. **ADVISORY COMMITTEE** (List the names, titles, and organizational affiliations of members of the advisory committee that has been selected to advise the college on the development and implementation of this occupational program. Attach advisory committee meeting minutes that include proposed program recommendations.)

K. **ANALYSIS OF AFFECTED INSTRUCTIONAL UNITS** (Describe the results of consultation with other instructional units and the expected affects this program will have on them.)

Computer Networking Operating Systems (CVCNOS)
Advanced Certificate

Program Effective Term: Fall 2001

This program prepares you for jobs as a network administrator, where you will install, configure, and troubleshoot Microsoft client-server networks. You also will receive preparation for the Microsoft Certified Systems Engineer (MCSE) exams. The credits in this program may be applied toward an associate degree.

Technology Division
Computer Instruction and Electronics Department

Advisors: Michael Galea, John Trame

Program Admission Requirements:
•Completion of the Computer Systems Technology Certificate (CTCSTC) with a GPA of 2.0 or better

Major/Area Requirements (19 Credits)

Course	Title	Credits
CNT 201	Managing Microsoft Workstations	2
CNT 211	Administering Microsoft Windows Networks	3
CNT 221	Implementing a Microsoft Windows Network Infrastructure	3
CNT 231	Implementing a Microsoft Windows Directory Services Infrastructure	3
CNT 241	Designing a Microsoft Windows Directory Services Infrastructure	2
CNT 251	Designing Security for a Microsoft Network	3
CNT 261	Designing a Microsoft Network Infrastructure	3

Minimum Credits Required for the Program: 19