Advisory Committee Fall 2024 Minutes
Computer and Information Sciences
Vernon College Skills Training Center
Multipurpose Room 400
November 20, 2024
4:00PM

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Members Present
Karen Fite
Deanna Scheffe
John McKee (TEAMS)
Shayla Diaz
Franklin Lunsford (TEAMS)
Matthew Prescott (TEAMS)
Zac Scheffe
Riggs Consuelo
David Fuentes
Thomas Pennartz
Robin Read
Christopher Wilton

Vernon College Faculty/Staff
Bettye Hutchins
Zachary Nguyen-Moore
Sharon "Mac" Wallace
Donna Turney
Jeff Griner (TEAMS)
Mark Cisneros

Members Not Present
Robin Amos
Tom Ostovich

Welcome and Introductions ..... Sharon "Mac" Wallace
Sharon Wallace welcomed committee members and invited all to introduce themselves.

Purpose of Advisory Committee ..... Bettye Hutchins
Bettye Hutchins reviewed the purpose and importance of advisory committees and the role they play at Vernon College.

Election of Chair, Vice-Chair, and Recorder ..... Bettye Hutchins
Bettye Hutchins explained the roles of vice chair and recorder and invited the committee to volunteer or nominate others for these roles.

Chair – Christopher Wilton
Volunteer for Vice Chair – Robin Read
Volunteer for Recorder – Shayla Diaz

Chair…….. Chris Wilton

Old Business/Continuing Business ..... Chris Wilton
With no old business to review, Chris Wilton moved on to discuss new business.

New Business ..... Chris Wilton

A. Review program outcomes

*Chris Wilton asked Sharon Wallace to review the program outcomes listed below. Sharon proposed the addition of an additional program outcome (**Systems Monitoring:** Maintain end-user and network systems through continuous monitoring of performance, operations and procedures using software and event logs.) which would change the order and number of outcomes seen added as program outcome #7 in the matrix below.*

Program outcomes

1. Identify all internal/external hardware components of computer systems (PCs, laptops, servers) and demonstrate the ability to assemble/disassemble these systems.
2. Assess the operating efficiency of various computer systems and provide preventative maintenance, upgrades, and replacement components as needed.
3. Install, maintain and upgrade the various operating software on computer systems, including the IOS software used by high-end networking devices (routers & switches).
4. Install and maintain all networking connectivity devices typically found within the normal operations of the home or business.
5. Identify common problems affecting computer systems; troubleshoot and present solutions that improve daily operations and the quality of networking connectivity.
6. Develop and implement security protocols (policies and procedures) at all levels of computer use and networking to ensure daily business operations will not be compromised.
7. Provide customer support and maintain a professional working relationship with customers and co-workers.

Program outcomes mapped to courses

Program: Computer and Information Sciences	**Credential: Associate in Applied Science (AAS) Degree**
Award: Computer and Information Sciences Associate in Applied Science Degree	
CIP: 11.0101	

LIST OF ALL COURSES REQUIRED AND OUTCOMES								
OUTCOMES							**Course Number**	**Course Title**
1	**2**	**3**	**4**	**5**	**6**	**7**		
						x	LEAD 1100	Workforce Development with Critical Thinking
X	X	X		X	X		CPMT 1351	IT Essentials: PC Hardware and Software
X	X	X	X	X	X		ITNW 1458	Network +
	X		X	X	X		ITNW 1325	Fundamentals of Networking Technologies (A)
	X	X	X	X	X		ITNW 2454	Internet/Intranet Server
	X	X	X	X	X		ITNW 2312	Routers
					X		ITSE 1306	PHP Programming
					X		ITSE 1407	Intro to C++ Programming
X	X	X	X	X	X	X	ITNW 1316	Network Administration
					X	X	ITSC 2339	Personal Computer Help Desk Support
					X		ITSE 1402	Computer Programming (A)
	X	X	X	X	X		ITSY 1442	Information Technology Security
	X	X	X	X	X	X	ITSY 2400	Operating System Security
	X	X	X	X	X		SLPS 2330	Security of Computers and Data
						8. **Customer Relations**: *Provide customer support and maintain a professional working* relationship with customers and co-workers.		

7. **Systems Monitoring:** Maintain end-user and network systems through continuous monitoring of performance, operations and procedures using software and event logs.
6. **Security:** Develop and implement security protocols (policies and procedures) at all levels of computer use and networking to ensure daily business operations will not be compromised.
5. **Troubleshooting**: Identify common problems affecting computer systems; troubleshoot and present solutions that improve daily operations and the quality of networking connectivity.
4. **Network**: Install and maintain all networking connectivity devices typically found within the normal operations of the home or business.
3. **Software Configuration**: Install, maintain and upgrade the various operating software on computer systems, including the IOS software used by high-end networking devices (routers & switches).
2. **Software:** Assess the operating efficiency of various computer systems and provide preventative maintenance, upgrades, and replacement components as needed.
1. **Hardware:** Identify all internal/external hardware components of computer systems (PCs, laptops, servers) and demonstrate the ability to assemble/disassemble these systems.

1. **Approve program outcomes**

Chris asked if there were any questions or comments. With no additional discussion, he asked for a motion to approve the program outcomes with proposed changes.
Deanna Scheffe made a motion to approve.
Riggs Consuelo seconded the motion.
The motion passed and the committee approved the program outcomes with proposed changes.
Chris then moved on to assessment methods.

B. Assessment methods and results

Chris Wilton asked Sharon Wallace to review the assessment methods.

Students who take the 2-year Associate or current Level-1 Certificate degree are assessed according to the courses taken. Assessment will demonstrate through proficiency in the objectives listed in the program outcomes for each course. They will be graded through participation in class activities/projects/hand-on assignments and their performance on quizzed and/or examinations. All students will be required to complete all **assignments** that pertain to the goals of those courses, as the final assessment to measure the proficiency of what each student has learned based on the degree taken.

Results from the student's assessments are shown by completing all course outcomes and a passing grade. **See attached grading metrics

Fall 2023 (Aug-Dec)	11
Spring 2024 (Jan-May)	3
Summer 2024 (May-June)	2

1. Approve assessment methods and results

After review, Chris asked if there were any questions or comments. With no additional discussion, Chris asked for a motion to approve the assessment methods as presented.
Deanna Scheffe made a motion to approve.
Karen Fite seconded the motion.
The motion passed and the committee approved the assessment methods as presented.
Chris then moved on to workplace competency.

C. Workplace competency (course or exam)

Chris Wilton asked Sharon Wallace to review the following workplace competency information.

Verification of workplace competencies:
Level 1 Certificate: Capstone Experience – ITNW 1458 Network + (A)
A.A.S.: Capstone Experience – ITNW 1458 Network + (A)

Workplace competency:

ITNW 1458 Network+ accesses the students competencies and work towards the CompTIA Network+. The students will be using materials tailored towards specific areas needed towards a IT Specialist. Upon completion of the Network+ course students will re-enforce their knowledge in a variety of skills needed to be a successful IT Specialist and also let the students walk out of Vernon College with a Degree and Certifications and a Network+ Certification.

ITNW 1458 Network +

Program Outcomes:

The program learning outcomes for Computer and Information Science have been changed to reflect more to student-centered education instead of the prior outcomes which focused on program goals and initiatives. These outcomes describe important and critical learning that program students accomplish during training and can significantly contribute to the workforce through their abilities (skills) and attitudes (values) after graduation. These outcomes are the bases for curriculum design, content delivery, and assessment on an exploration of the incorporated knowledge, skills, and values needed by both students and the workforce environment.

1) After graduation, students will be able to recognize key components, internal and external, and operate a variety of computer systems used in various environments used to produce efficient, accurate production of data.
2) After graduation, students will be able to assemble, install and maintain various computer systems that are used in a variety of applications today.
3) After graduation, students will be able to understand various internal operating systems used in computer systems as well as maintain and troubleshoot errors.
4) After graduation, students will be able to set up, maintain, and troubleshoot high-end networking devices as well as operate the ISO software needed to maintain a LAN/WAN network.
5) After graduation, students will be able to troubleshoot and solve problems that impact the level of quality of networking at all levels and present solutions to improve network connectivity.
6) During course work, students will develop personal attributes, soft-skills desired by today's employers to be successful as leaders, team members, and followers in a diverse labor force population.
7) Implement security measures within all aspects of computer systems (end-users, high-end systems).

General Course Assessments:

Here's what you will get:

The **CompTIA Network+ N10-008** exam verifies that a candidate can assess an enterprise's network posture, and recommend and implement an appropriate network infrastructure for troubleshooting, configuring, and managing networks.

It provides knowledge of various concepts, such as:

OSI
Network Topologies
Network Media
IP Addressing
Ports and Protocol
Network Services
Corporate and Datacenter Architectures
Cloud Concepts
Network Devices
Routing/Bandwidth Management
Wireless Standards
Network Availability
Policies
Disaster Recovery
Security Concepts
Attacks
Network Hardening
Remote Access
Physical Security
Troubleshooting Methodology
Network Software Tools/Commands
Troubleshoot Wireless Issues
Troubleshoot Network Issues

Students will be required to complete all Topic materials listed above, project labs, simulations and hands on pertaining to the goals of this course. Throughout this course, any Labs, Quizzes and Exams will be graded with immediate feedback to the students for evaluation. Review of written follow-up reports, during the course, will outline their progress on projects and goals and will be evaluated by both the student and instructor upon completion of the problem(s) and/or project(s). Their grade will be based upon how well they accomplished the special projects assigned and any written questions and tests the instructor deems appropriate for the materials covered.

***Number of Students taking*: (ITNW 1458)**

(Spring 2024) 5
(Fall 2024) 7

1. Approval of workplace competency

After review, Chris asked if there were any questions or comments. With no additional discussion, Chris asked for a motion to approve the workplace competency as presented.
Riggs Consuelo made a motion to approve.
Deanna Scheffe seconded the motion.
The motion passed and the committee approved the workplace competency as presented.
With no applicable program specific accreditation, Chris then moved on to review program curriculum/courses/degree plans.

D. Credentials offered

Chris Wilton asked Sharon Wallace to review the following credentials information.

ITNW 1458 Network+ course is revised towards training and testing students for the CompTIA Network +, with Accreditation
CPMT 1351 IT Essentials: Hardware and Software: tracks towards the CompTIA A+
Cisco Networking Academy: Earn digital badges and certifications to verify your knowledge and skills. (Show employers and your network proof of your skills and knowledge with digital badges and certifications.)

ENTRY-LEVEL CERTIFICATIONS (Cisco Skills for All)

Cisco Certified Support Technician (CCST) Cybersecurity
Cisco Certified Support Technician (CCST) Networking
Cisco Certified Network Associate (CCNA)
PCEP Certified Entry-level Python Programmer
JSE-Certified Entry-level JavaScript Programmer
CPE-C++ Certified entry-level Programmer
Server+

E. Review program curriculum/courses/degree plans

Chris Wilton asked Sharon Wallace to review the curriculum, courses, and degree plan. Sharon proposed the deletion of the existing Level 1 Certificate and creation of 3 new Level 1 Certificates and 3 Occupational Skills Awards (OSA's). Discussion followed regarding the proposed names of the proposed Level 1 Certificates and the names and course listings for the OSA's. After Certificate and OSA related discussion, the committee was asked if there were any suggestions for additional skills/knowledge which should be added to the curriculum. The committee advised the program to add skills and information related to ticket systems and PBX phone systems to the curriculum.

***Changes will be made to the **Current Level 1 Certificate of Completion** and **A.A.S Degree.**

***Comparison copies of both degrees are provided

***Additionally, the program will have 3 level 1 certs, with 3 OSAs (Occupational Skills Achievement Award), Students can complete a level 1 cert in one semester then take the courses for an additional level 1 certs, etc. All courses in the level 1 certs lead into the AAS. Student can get more than 1 level certificate now, THECB.

Changes to AAS Degree Plan

COMPUTER INFORMATION SYSTEMS

Catalog 2025-2026

ASSOCIATE IN APPLIED SCIENCE DEGREE

DEPT.	NO.	COURSE	SCH	GRD	TERM	REMARKS	
General Education Requirements (15 SH)							
ENGL	1301	Composition I	3				
GOVT	2305	Federal Government	3				
MATH	1314	College Algebra	3				
SPCH	1315	Public Speaking	3				
.		**Humanities Requirement** #N/A	3				
Related Requirements (1 SH)							
LEAD	1100	Workforce Development w/Critical Thinking	1				
Major Requirements (44 SH)							
CPMT	1351	IT Essentials: PC Hardware and Software	3				
ITNW	1358	Network +	**3**			**Change to 3 hours**	
ITNW	1325	Fundamentals of Networking Technologies **(A)**	3				
ITNW	2454	Internet/Intranet Server	**4**			**Change to 4 hours**	
ITNW	2312	Routers	3				
ITSE	1306	PHP Programming	3				
ITSE	1407	Introduction to C++ Programming	4				
ITNW	1316	Network Administration	3				
ITSY	1442	Information Technology Security	**4**				
ITSY	2400	Operating System Security	**4**				
ITSC	2339	Personal Computer Help Desk Support	3				
SLPS	2330	Security of Computers and Data	**3**				
ITSE	1402	Computer Programming **(A)**	4				
		Total:	**60**				

Changes to **Certificate of Completion Level 1**

Removed from Program

Replaced with (3) Level 1 Certs

COMPUTER INFORMATION SYSTEMS

Catalog 2025-2026

Certificate of Completion Level 1

DEPT.	COURSE	SCH	GRD	TERM	REMARKS
LEAD 1100	Workforce Development w/Critical Thinking	1			
Major Requirements (34 SH)					
CPMT 1351	IT Essentials: PC Hardware and Software	3			
ITNW 1358	Network +	3			
ITNW 1325	Fundamentals of Networking Technologies **(A)**	3			
ITNW2454	Internet/Intranet Server *(Spring)*	4			
ITNW 2312	Routers *(Spring)*	3			
ITSE 1306	PHP Programming *(Spring)*	3			
ITNW 1316	Network Administration	3			
ITSY 1442	Information Technology Security	4			
ITSE 1407	Introduction to C++ Programming	4			
ITSE 1402	Computer Programming **(A)**	4			

Total: 35

Verification of Workforce Competency: CPMT 1351, ITNW 1325, ITNW 1458

(A) Course included on the State's Advanced Technical Credit list. (See Advanced Technical Credit.)

Certificates:

**Advisory Committee proposed the name for "Operational Support Specialist" be changed to "Network Support Specialist", "Customer Service Specialist" changed to "IT Support Specialist", and "Programming" changed to "Scripting Specialist".*

Level I Operational Support Specialist, 16 wks			
11.0901	ITNW 2454	Internet/Intranet Server	4
11.0901	ITNW 2312	Routers	3
11.0901	ITNW 1358	Network +	3
11.0901	ITNW 1316	Network Administration	3
43.0109	SLPS 2330	Security of Computers and Data	3
			16
Verification of workplace competency			
	ITNW 1358	Network +	
	Network + Certification testing fee in course)		3
Level I Customer Service Specialist, 16 wks			
47.0104	CPMT 1352	IT Essentials: PC Hardware and Software	3
11.1002	ITNW 1325	Fundamentals of Networking Technologies(	3
11.0101	ITSC 2339	Personal Computer Help Desk Support	3
11.1003	ITSY 1442	Information Technology Security	4
11.1003	ITSY 2400	Operating System Security	4
			17
Verification of workplace competency			
	CPMT 1351	IT Essentials: PC Hardware and Software A+	
	Certification (embedded in curriculum, no cost to student)		
Level I Programming, 16 wks			
11.0201	ITSE 1306	PHP Programming	3
11.0201	ITSE 1407	Introduction to C++ Programming	4
11.0201	ITSE 1402	Computer Programming(A)	4
11.1003	ITSY 2400	Operating System Security	4
52.0201	LEAD 1100	Workforce Development w/Critical Thinking	1
			16
Verification of workplace competency			
	ITSE 1402	Computer Programming(A)	

OSAs: (Occupational Achievement Awards)

*Advisory Committee suggested the "SLPS 2330: Security of Computers and Data" under Computer Hardware Essentials OSA be replaced with "CPMT 1351: IT Essentials". It was also suggested the "ITSY 2400 Operating System Security" under Computer Programming Essentials be replaced with "ITSE 1402 Computer Programming."

OSA-Computer Security Essentials

ITSY 2400	Operating System Security	4
ITNW 1325	Fundamentals of Networking Technologies(	3
ITSY 1442	Information Technology Security	4
		11

OSA-Computer Hardware Essentials

ITNW 2454	Internet/Intranet Server	4
ITNW 2312	Routers	3
SLPS 2330	Security of Computers and Data	3
		10

OSA-Computer Programming Essentials

ITSE 1306	PHP Programming	3
ITSE 1407	Introduction to C++ Programming	4
ITSY 2400	Operating System Security	4
		11

Course descriptions and learning outcomes provided as a separate document (attached)

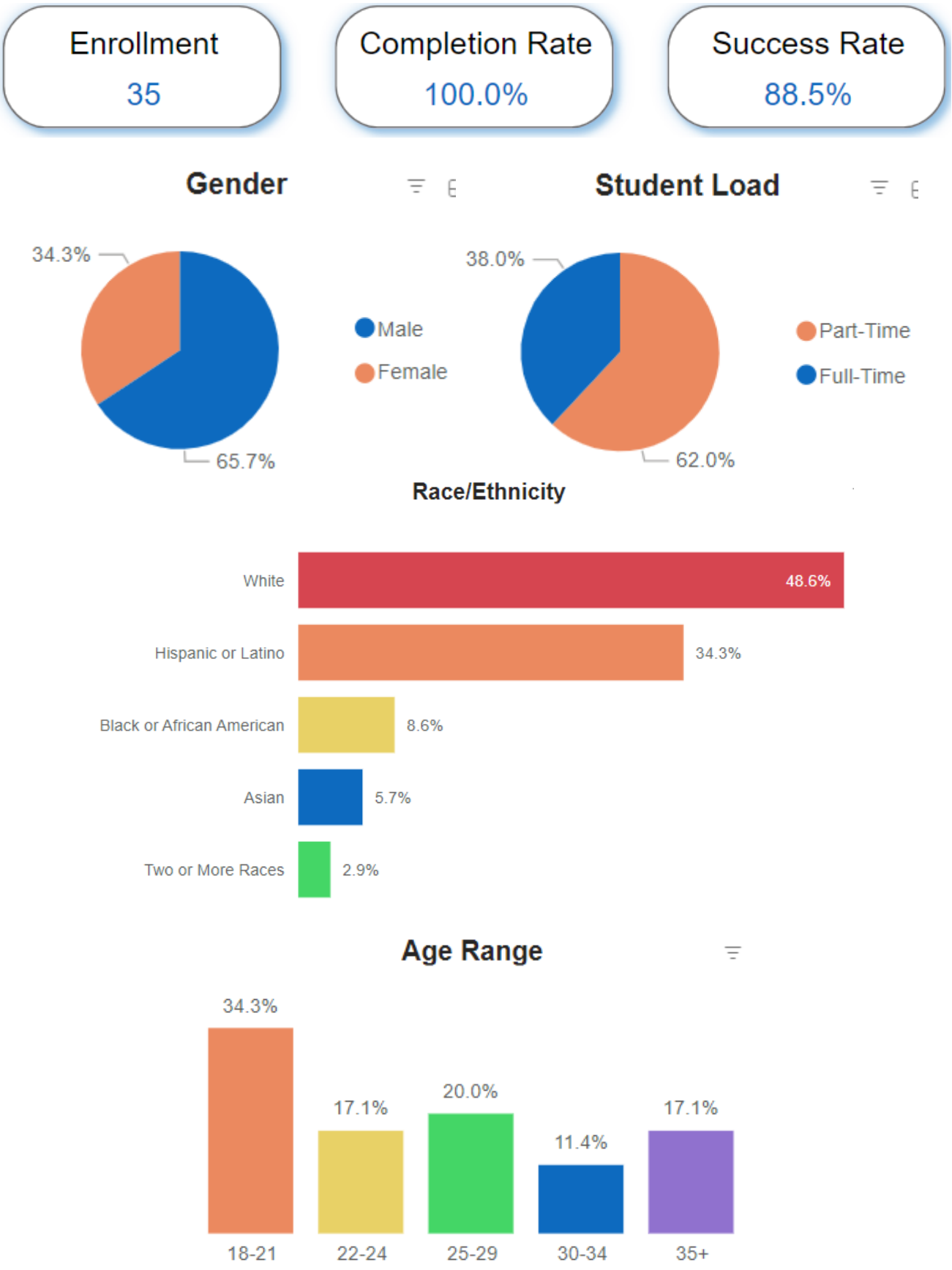
1. **Approve program revisions (if applicable)**

After review, Chris asked if there were any questions or comments. With no additional discussion, Chris asked for a motion to approve the curriculum/courses/degree plans as presented.
David Fuentes made a motion to approve.
Zac Scheffe seconded the motion.
The motion passed and the committee approved the curriculum/courses/degree plans as presented.
Chris then moved on to statistics.

F. Statistics:

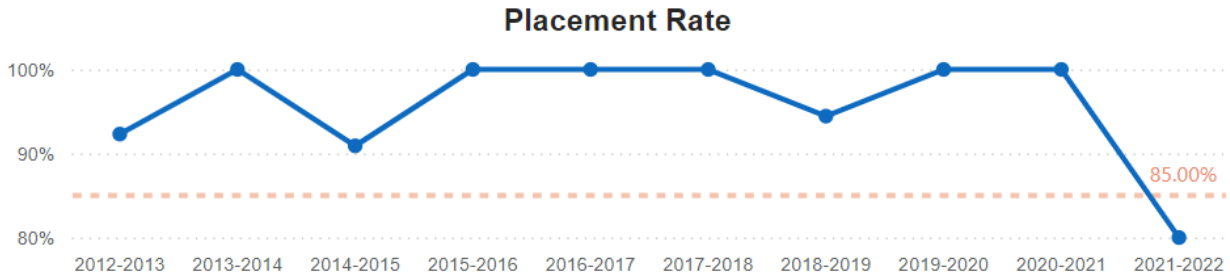
Chris Wilton asked Sharon Wallace to review the following statistics:

- Program Statistics:
  - Enrollment 2023-2024 **78**
    (Fall 23/Spring 24/Sum24)
  - Graduates 2023-2024 **20**
    (Fall 23/Spring 24/Sum24)



***Fall 2023 Data**

Program Completer Placement Rate - % of program completers who are employed or pursuing additional education within one year of graduation.



G. Local Demand/ Labor Market Outlook:

Chris Wilton asks Sharon Wallace to review the following labor market outlook information and questions whether the data provided is accurate. Bettye next asks questions from the Comprehensive Local Needs Survey, collecting information used in reporting to the state.

Occupation	National Median Wage	State Median Wage	Local Median Wage	Current /Projected Job openings (annual)	Projected Growth (annual)
Computer User Support Specialists	29.61/hr $56,851/annual	26.91/hr $51,667/annual	$25.55/hr $49,075/annual	5,757 (state) 13 (local)	1.92% (state) .35% (local)
Computer Systems Analysts	$51.70/hr $99,264/annual	$51.31/hr $98,51/annual	$41.15/hr $79,019/annual	4,985 (state 6 (local)	1.78% (state) 1.81% (local
Information Security Analysts	$57.63/hr $110,649/annual	$55.59/hr $106,732/annual	N/A	1,719 (state)	4.10% (state)
Computer Network Support Specialists	$36.57/hr $70,214/annual	$35.02/hr $67,238/annual	N/A	1,634 (state)	1.80% (state)
*Labor Market Outlook (O*NET)					

H. Evaluation of facilities, equipment, and technology

Chris Wilton asked Sharon Wallace to review the following information regarding facilities, equipment, and technology.

In 2023-2024 the Office of Instructional Services fully funded two PolyPrinter 229N 3D Printers for a total of $7360 through the Carl D. Perkins Career and Technical Education Grant.

Purchases planned for the 2025-2026 year, I am reviewing computer upgrades for (2) classrooms. The current computers used will be non-compliant for an upgrade when Window 10 is no longer supported (Oct 2025) due to being 15 years old. With the Cisco curriculum, Certifications and various software needs to train students efficiently, I require a higher end computer system than provided by

the College. Currently, I operate my computers off the IT domain because I need an open computer system not impeded by the standard IT restrictions. I have been able to manage the classrooms efficiently with no security issues and have never requested any computer upgrades for 15 years. I was able to purchase my current systems out of my department funds, however with budget and Perkins funding cuts and no other resource of funding to purchase new systems I will need to look at prospects of using Linux or taking some allocated computers and possibly upgrading them. This is a work in progress.

After review, Chris asked if there was any suggested equipment to look into for the program. With no further discussion to be had, Chris moved on to professional development.

I. Professional development of faculty

Chris Wilton asked Sharon Wallace to review professional development. Steven reviewed his latest professional development opportunities and discussed upcoming possibilities. Chris asked for any suggestions, then with no further discussion, moved on to promotion and publicity.

As required I continue to take part in various Conferences retaining for the Cisco Academy which is mostly remote. Sharon Wallace and Jeff Griner also attend workshop sessions offered by cisco to keep up with changing technologies and methods of teaching. This training is required by Cisco for maintaining our accreditation with the Cisco Academy that we have had for the past 21 years.

When available I attend Cybersecurity workshops at Texas Tech in Lubbock, TX which offer detailed information on Cybersecurity that is extremely beneficial to classroom learning.

I am also working at bring more AI learning and awareness into my classroom in various courses.

With all the ongoing technology changes in IT my Adjunct and myself have found the teacher is becoming more and more the student with the vast learning opportunities in the field of IT.

J. Promotion and publicity for the program

Chris Wilton asked Sharon Wallace to review promotion methods. Sharon Wallace reviewed promotion and publicity/recruiting practices. Bettye Hutchins added information regarding marketing efforts funded by the Office of Instructional Services as well as the duties of the CTE Navigator in visiting area junior highs, high schools, and community events. After review, Chris asked if there were any comments or suggestions. With no further discussion, he then moved on to special populations.

Promotion and publicity about the Computer and Information Science program is always ongoing with the business and industry (gender equality).

Some of the promotions and publicity we do:

- Posters throughout the campuses
- Online video presentations on the program
- Tours (when applicable)
- Past student's promotion
- Recruiting Coordinators promoting programs
- Visitation of various business

- Radio and TV

K. Serving students from special populations:

Chris Wilton asked Sharon Wallace to review the definitions of special populations and the services available to those who apply. Bettye Hutchins goes on to expand on the services covered by the college and it's various departments, including emergency aid funding and a new food pantry located in each campus.

Vernon College is an open-enrollment college. The Proactive Assistance for Student Services (PASS) department offers many services for documented disabilities such as but not limited to quiet testing, longer testing times, interpreters, and special equipment.

Vernon College has a program titled "New Beginnings" for students who qualify to receive transportation, childcare, and/or textbook loans. Perkins funding is also offering assistance to break down barriers such as uniform, supply, and equipment costs.

Peer to Peer mentoring, tutoring (online and in-person), resume building, student success series, and counseling are just a few of the other options/services available to students.

1. Special populations' new definitions:
    a. Individuals with disabilities;
    b. Individuals from economically disadvantaged families, including low-income youth and adults;
    c. Individuals preparing for nontraditional fields; male/female ratio
    Enrollment 2022-24 (AAS,COC) **Total 62 student**
    2022-2023 (35) 11 females/24 males
    2023-2024 (27) 8 females/19 males
    d. Single parents, including single pregnant women;
    e. Out-of-workforce individuals;
    f. English learners;
    g. Homeless individuals described in section 725 of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11434a);
    h. Youth who are in, or have aged out of, the foster care system; and
    i. Youth with a parent who—
        i. is a member of the armed forces (as such term is defined in section 101(a)(4) of title 10, United States Code);
        ii. is on active duty (as such term is defined in section 101(d)(1) of such title).

ATTACHMENTS:

Computer and Information Sciences: Course Descriptions

CPMT 1351 IT Essentials: PC Hardware and Software

An introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level information and communication technology (ICT) professionals. The curriculum covers the fundamentals of PC technology, networking and security, and also provides an introduction to advanced concepts addressed by CISCO CCENT, CCNA and COMPTIA A+ certifications. Topics may adapt to changes in industry practices. Lab Fee: $24.00; Program Fee: $50.

ITNW 1316 Introduction to Network Administration

An introduction to the basic concepts of network administration. Lab Fee: $24.00; Program Fee $40.00

ITNW 1325 Fundamentals of Networking Technologies (A)

Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. Lab Fee: $24.00; Program Fee $40.00.

ITNW 1458 Network + Assists individuals in preparing for the Computing Technology Industry Association (CompTIA) Network+ certification exam and career as a network professional. Lab Fee $24.00; Program Fee 40.00; Testing Fee: $85.00

ITNW 2312 Routers Router configuration for local area networks and wide area networks. Includes Internet Protocol (IP) addressing techniques and intermediate routing protocols. Lab Fee: $24.00; Program Fee $40.00.

ITNW 2354 Internet/Intranet Server Advanced concepts in the designing, installing, and administration of an Internet/Intranet server. Lab Fee: $24.00; Program Fee 80.00

ITSE 1306 PHP Programming Introduction to PHP including the design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security. Lab Fee: $24.00; Program Fee $40.00.

ITSE 1407 Introduction to C++ Programming Introduction to computer programming using C++. Emphasis on the fundamentals of object-oriented design with development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Lab Fee: $24.00; Program Fee $40.00.

ITSE 1402 Computer Programming (A) Introduction to computer programming including design, development, testing, implementation, and documentation. Lab Fee: $24.00; Program Fee $40.00.

ITSY 1442 Information Technology Security Instruction in security for network computer hardware, software, virtualization, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Topics may adapt to changes in industry practices. Lab Fee: $24.00; Program Fee $40.00.

ITSY 2400 Operating System Security Safeguard operating systems by demonstrating support skill and designing and implementing security processes. Identify security threats and monitor security

implementations. Use best practices to configure operating systems to industry security standards. Lab Fee: $24.00; Program Fee $40.00.

SLPS 2330 Security of Computers and Data Cyber theft and computer fraud. Includes physical protection of computers and peripherals. Lab Fee: $24.00; Program Fee $40.00.

ITSC 2339 Personal Computer Help Desk Support Diagnosis and solution of user hardware and software related problems with on-the-job and/or simulated projects. Lab Fee: $24.00; Program Fee $40.00.

ITSC 2364 – Practicum (or Field Experience) – Computer and Information Science, General (3)

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. The guided external experience may be paid or unpaid.

** This course will be kept on a as needed basis, not part of the degree plans

Skills-Based Assessments Grading Rubric

SBA	*Program Outcome Reference	Section	Point Value	Points Received
Hardware	**1,2,3,5,6**	1. Disassemble the Computer System	40	
		2. Reassemble the Computer System	40	
		3. Documentation	20	
		(Total Points Possible)	100	
Mobile Devices		1. Configure a mobile tablet or smartphone	80	
		2. Documentation	20	
		(Total Points Possible)	50	
Printers		1. Installing a Printer	30	
		2. Sharing a Printer	50	
		3. Documentation	20	
		(Total Points Possible)	50	
Software	**1, 2,3,5,6**	1. Install Software (OS, programs)	30	
		2. Windows Configuration	30	
		3. Documentation	20	
		(Total Points Possible)	100	
Programming	**1,2,3,8**	1. Web Page development	30	
		2. Scripting/Programming/Publishing	30	
		3. Troubleshooitng Code	20	
		4. Documentation	20	
		(Total Points Possible)	100	
System Configuration	**1,2,3,5**	1. BIOS Setup Program	20	
		2. Troubleshoot Installation/Drivers	40	
		3. Updates/Patches		
		4. Documentation	20	
		(Total Points Possible)	100	
Networking	**3,4,5,6,7**	1. Build Ethernet Cables	10	
		2. Network Conectivity (Toplogies)		
		3. Share Resources	20	
		4. LAN/WAN/MAN	20	
		5. Router/Switch Configuration (Protocols)	20	
		6. LAN/WAN	20	
		7. Documentation	10	

		(Total Points Possible)	100
Troubleshooting	**1, 2, 3, 4, 5,6**	1. Hardware Troubleshooting	25
		2. Software Troubleshooting (Viruses, Adware, etc.)	25
		3. Networking Troubleshooting	25
		4. Security Troubleshooting	25
		(Total Points Possible)	100
Security	**6,7**	1. PC Security	25
		2. LAN/WAN Security	25
		3. Router/Switch Security Configuration	25
		4. Documentation	25
		(Total Points Possible)	100
Systems Monitoring	**5,6,7**	1. Preventive Maintenance Concepts	80
		2. Documentation	20
		(Total Points Possible)	100
Customer Relations	**5,8**	1. Customer and Technician Interaction	100
		(Total Points Possible)	100
		Overall Total Grade Possible	1000
		Total Grade Received	

* There are (8) Outcomes I want to achieve: 1. Hardware 2. Software 3. System Configurations 4. Network 5. Troubleshooting 6. Security 7. Systems Monitoring 8.Customer Relations

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1.Identify all internal/external hardware components of computer systems (PC's, laptops, servers) and demonstrate the ability to assemble/disassemble these systems.

2. Assess the operating efficiency of various computer systems and provide preventative maintenance, upgrades, and replacement components as needed.

3. Install, maintain and upgrade the various operating software on computer systems, including the IOS software used by high-end networking devices (routers & switches).

4. Install and maintain all networking connectivity devices typically found within the normal operations of the home or business.

5. Identify common problems affecting computer systems; troubleshoot and present solutions which improve daily operations and the quality of networking connectivity.

6. Develop and implement security protocols (policies and procedures) at all levels of computer use and networking to ensure daily business operations will not be compromised.

7. Maintain end-user and network systems through continuous monitoring of performance, operations and procedures using software and event logs.

8. Provide customer support and maintain a professional working relationship with customers and co-workers.

Chris Wilton asked if the committee had any further action, discussion or recommendations. With no further discussion to be had, Chris adjourned the meeting at 1:04pm.

**On January 8, 2025, the following email was sent to the advisory committee for an additional vote regarding the Level 1 Certificates and Occupational Skills Awards:*

"The Vernon College CIS Advisory Committee met on Nov. 20, 2024 and approved some changes to the CIS curriculum. However, after the meeting some committee members expressed some reservations about dividing the level 1 certificate into three smaller level 1 certificates. Specifically, they were concerned that the smaller certificates would not prepare students for the workplace. Vernon College values the input of advisory committees who we rely on to help us keep our curriculum relevant. Sharon "Mac" Wallace worked over the Christmas break to revise the level 1 certificates to address these concerns. The current proposal creates 2 level 1 certificates a basic and advanced and 2 Occupational Skills Awards that feed directly into each of the level 1 certificates. If students complete both level 1 certificates they will have 45 hours of CIS courses which leaves only the 15 hrs. of core curriculum courses needed to earn the AAS degree. I have attached the proposed new Level 1 certificates and OSAs for you to review. Please use the voting buttons to approve or reject this proposal."

Computer and Information Sciences: Level 1 Certificate (1 Year) Basic

CIP	Course	Title	SCH
11.1002	ITNW 1325	Fundamentals of Networking Technologies*	3
11.0901	ITNW-2454	Internet/Intranet Server*	4
11.0101	ITSC 2339	Personal Help Desk Support	3
11.0201	ITSE 1407	Introduction to C++ Programming	4
11.1003	ITSY 1442	Information Technology Security*	4
11.0201	ITSE 1402	Computer Programming(A)*	4
52.0201	LEAD 1100	Workforce Development w/ Critical Thinking	1
		Total Hrs.	23

Verification of Workplace Competency

ITSE 1402 – Computer Programming

Computer and Information Sciences: Level 1 Certificate (1 Year) Advanced

CIP	Course	Title	SCH
47.0104	CPMT 1351	IT Essentials: PC Hardware and Software*	3
11.0901	ITNW 2312	Routers	3
11.1003	ITSY 2400	Operating System Security	4
43.0109	SLPS 2330	Security of Computers and Data	3
11.0901	ITNW 1358	Network +*	3
11.0201	ITSE 1306	PHP Programming	3
11.0901	ITNW 1316	Introduction to Network Administration*	3
		Total Hrs.	22

Verification of Workplace Competency

ITNW 1358 – Network+

CPMT 1351 – IT Essentials: PC Hardware & Software

OSA 1 Basic (11 SCH, 1 semester)

Course	Title	SCH
ITNW 1325	Fundamentals of Networking Technologies*	3
ITSY 1442	Information Technology Security*	4
ITSE 1402	Computer Programming(A)*	4
	Total Hrs.	11

OSA 2 Advanced (9 SCH, 1 Semester)

Course	Title	SCH
ITNW 1325	Fundamentals of Networking Technologies*	3
ITSY 1442	Information Technology Security*	4
ITSE 1402	Computer Programming(A)*	4
	Total Hrs.	11

**The committee voted via email to approve both the updated Certificate Level 1 and Occupational Skills Award options for the 2025-2026 academic year.*

Recorder Signature	Date	Next Meeting: Fall 2025
Shayla Diaz	3/31/2025	