

## **APPLICATION FOR ADMISSION**Fiber Network Engineer Program



UA Cossatot offers equal opportunity for admission. Programs and activities of UAC are provided to all students without regard to race, color, national origin, religion age, disability, Vietnam era veteran or special disabled veteran status, or sex. Some information is obtained for the sole purpose of state reporting and/or determining if the college is effectively reaching all segments of the population.

Applying is easy! Simply follow these steps.

Please print.			
Name:			
First	Middle	Last	Suffi
Social Security Number	[OR] Individual Taxpa	yer ID	
Date of Birth (MM/DD/YYYY):	Gender: □ Male	☐ Female ☐ Other	
E-mail Address:		Phone Number:	
Mailing Address:			
	City	State	Zip
	ident/US Citizen e:	State of Residence:	
□ Non-US Resident			
Secondary Education: (SELECT ONE)			
☐ Still in High School, Anticipated	Year of Graduation (YYYY):		
			State
☐ No High School Diploma or GE	D - 21 years of age or younger		
☐ No High School Diploma or GE	D - 22 years of age or older		
☐ Graduated High School - Year	(YYYY):		
High School (FULL NAME)			State
☐ Received GED Diploma - Year			
☐ Received HiSet Diploma - Year	(YYYY):		
$\square$ Completed Home School - Yea	r (YYYY):		
Post-Secondary Education: (SELECT THE	HIGHEST LEVEL COMPLETED)		
☐ Some College - No Credential			
☐ Certificate of Proficiency / Tech	nical Certificate / Other Certificate	Э	
☐ Associate Degree			
☐ Bachelor's Degree			
☐ Advanced Degree / Master's / F	Professional / Doctoral Degree		
☐ Not Applicable			

	Ро	st-Secondary Institution (PSI) last attended, if applicable			
	(FL	JLL NAME)	State		
What	occu	upation are you preparing to enter by taking this course?			
		Telecommunications Equipment Installers and Repairers (SOC 49-9052)			
		Other (please list occupation)			
What's	s the	e primary business of the employer where you plan to work?			
		□ Construction (NAICS 23)			
		Other (please select one of the following)  Agriculture, Forestry, Fishing and Hunting (11)  Mining (21)  Utilities (22)  Manufacturing (31-33)  Wholesale Trade (42)  Retail Trade (44-45)  Transportation and Warehousing (48-49)  Information (51)  Finance and Insurance (52)  Real Estate Rental and Leasing (53)  Professional, Scientific, and Technical Services (54)  Management of Companies and Enterprises (55)  Administrative and Support and Waste Services (56)  Educational Services (61)  Health Care and Social Assistance (NAICS 62)  Arts, Entertainment, and Recreation (71)  Accommodation and Food Services (72)  Other Services (except Public Administration (81)  Public Administration (92)			
Ethnic	ity:	☐ Hispanic ☐ Asian ☐ Black ☐ American Indian ☐ White ☐ Native Hawaiian			
Emerg	ency	y Contact Name: Phone:			
STE	PT	WO: PROVIDE AUTHORIZATIONS AND ACKNOWLEDEMENTS			
By sig	ning	below, I confirm the following:			
$\checkmark$	I ha	I have earned a high school diploma or General Education (GED) Certification.			
	l un	understand that after completing or withdrawing from the program, I'll need to provide employment information or at least 18 months. This helps measure how well the program supports individuals funded by the grant.			
		n aware that hiring requirements vary by employer. Factors like a criminal record, driving history, or substance- lated offenses might affect my job opportunities, even if I successfully finish the program.			
	I give permission for the Arkansas Fiber Academy and its affiliates to access and review any of my records—public, private, or confidential—if needed.				
Printed Name of Applicant:					
Signat	ure o	of Applicant: Date:			

## STEP THREE: SUBMIT YOUR COMPLETED APPLICATION FOR ADMISSION

Submit a fully completed Fiber Network Engineer Application for Admission to Continuing Education Services.

Fax: (870) 584-1178

In-Person: Any UA Cossatot Location

Mail: Cossatot Community College of the University of Arkansas, 183 College Drive, De Queen, AR 71832

The Following Fiber Network Engineer Program Resources

May Be Kept for Future Reference

# UA COSSATOT FIBER NETWORK ENGINEER PROGRAM GUIDELINES

The Fiber Network Engineer Program is an Arkansas Fiber Academy program co-designed with industry partners to ensure students understand and master FTTH networks, routing, and switching. Practical labs, hands-on experiences, and guest lectures by industry experts are integrated into this 15-week program to give students a real-world understanding of how their learning applies outside the classroom and insights into the latest developments in FTTH technology.

## Arkansas Fiber Academy FIBER NETWORK ENGINEER PROBRAM OVERVIEW 450 Clock Hours

Participants are introduced to the following using the OSI and TCP Network models.

- 1. The Foundation:
  - a. Broadband history
  - b. Terminology
  - c. Past and current funding opportunities
  - d. Deployment processes
  - e. OSI and TCP models
  - f. Networking concepts
  - g. Decimal, Binary and Hexadecimal conversions
  - h. MS Office skills
- 2. Physical layer:
  - a. Structured cabling
  - b. Making T568A, T568B and crossover Ethernet cables
  - c. Fusion splicing fiber optic cables
  - d. Familiarization with Outside Plant infrastructure
  - e. Awarded Dura-line BICSI certifications and electronic badges
  - f. Hands-on examples of physical plant components
- 3. Data Link layer:
  - a. Understanding switching and MAC addresses
  - b. Knowledge of spanning tree and rapid spanning tree protocols
  - c. Deployment of G.8032 rings and LAGs
  - d. Hands-on Calix E7-2 GPON data and voice service deployment and provisioning
- 4. Network layer:
  - a. IPv4 and IPv6 addressing and subnetting
  - b. RIP, OSPF, IS-IS and BGP
  - c. Hands-on Juniper JUNOS CLI and J-Web experience
  - d. Local and remote device management via serial cables and SSH
  - e. Device OS upgrades and configuration backups
- 5. Data Link layer
  - a. TCP and UDP protocols
  - b. WireShark troubleshooting

### CREDENTIALS

Calix Broadband Engineer **C**ertification
Arkansas Fiber Academy Fiber Network Engineer Certificate
45 Continuing Education Units

#### Optional:

Juniper JNCIA-Junos Associate Certification Juniper Automation and DevOps Certification Calix AXOS E7 Specialist Certification Calix WIFI-Technician Specialist Certification Calix Broadband Architect Certification

#### Cost

Great news --- The Fiber Network Engineer Program is completely free to eligible participants. Plus, graduates are equipped with approximately \$1,200 in tools to begin their career. Thanks to a generous grant from the Office of Skills Development, everything needed --- training, certifications, tools, and equipment --- is fully covered.

Qualifying participants may also receive assistance with transportation costs.

Participants only need to bring a pen and paper. We've got everything else handled.

Just a quick note: If a student withdraws or is dismissed, all tools must be returned, or they'll be responsible for the replacement cost.

## **Entrance Requirements**

At Cossatot Community College of the University of Arkansas, we believe in opening doors to opportunity. Through our Fiber Network Engineer Program, we welcome dedicated individuals who are eager to step into a growing industry and build a future filled with potential.

To be admitted, applicants must meet the following requirements and submit a completed Fiber Network Engineer Program Application for Admission:

- 1. Age Requirement: Applicants must be at least 18 years old.
- 2. Education: Have a high school diploma or General Education Development (GED) Certification
- 3. Basic Computer Skills: A foundational understanding of computers is essential. You should be comfortable navigating an operating system, using a keyboard and mouse, managing files, and working with common software such as word processors and web browsers.
- 4. Career Commitment: Applicants must be willing to secure employment in the broadband industry upon graduation and take advantage of career services (*i.e. resume preparation, interview skill building, etc.*) offered by the program until employment is secured.
- 5. Employment Reporting: To help measure success and industry impact, graduates must be willing to provide employment information for at least 18 months following graduation.

If you're ready to take the next step, we welcome you to join us.

#### **Application for Admission**

Applying is simple --- no transcripts or tests needed! Just fill out a Fiber Network Engineer Program Application for Admission and submit it to Continuing Education Services. You can send it by fax, mail, or drop it off in person --- whatever works best for you.

And if you need any help along the way, our Continuing Education advisors are here to support you throughout the process.

#### **Enrollment**

We're excited to welcome new applicants! Admissions are handled on a first-come, first-served basis, so we encourage you to apply early. Once your application is approved, you'll have first pick of available training dates, ensuring you get the schedule that works best for you.

#### **Attendance Requirements**

We know life can be unpredictable, but being present and engaged is key to making the most of this fast-paced, intensive program. We ask all students to arrive on time and participate fully in every training session. Missing class --- even just a portion --- can make it tough to keep up and meet the learning outcomes needed for a Certificate of Completion. If you have any life or health circumstances that may affect your ability to attend, it might be best to wait until you can commit fully.

Since we want to make the most of every training opportunity, students who don't attend on the first day may be marked as "no-shows" and withdrawn from the program to open up their seat for someone else.

Emergencies happen, and if you ever need to miss class, please reach out to your instructor as soon as possible. We'll do our best to make arrangements for you, but make-up sessions depend on instructor availability and aren't always guaranteed. That means missing class --- whether for an emergency or otherwise --- could impact your ability to finish the course successfully.

If make-up sessions are needed to meet course requirements, students will be responsible for instructor compensation, their own transportation, and all other related expenses. If Continuing Education Services is working with a student due to an emergency or personal challenges affecting their attendance or academic performance, documentation will be required to verify the nature of the absence.

We want you to have the best learning experience possible, so if you ever need support, please don't hesitate to reach out!

#### **Dropping a Course**

If you need to drop a course, you can do so up to 5 business days before the start date by reaching out to Continuing Education Services to complete the process. Once dropped, your name will be removed from the course roster.

## Withdrawing from a Course

If you ever find yourself needing to withdraw from a course, it's important to reach out to Continuing Education Services to make it official. Students who withdraw before the course ends will receive a "W" (withdraw) grade on their transcript. However, if a student doesn't go through the proper withdrawal process, they'll end up with an "F" (fail) grade instead, which will be reflected on their transcript. Taking the time to complete the withdrawal process can make a big difference, so don't hesitate to connect with Continuing Education Services for guidance.

#### Administrative Withdraw from a Course

Students who don't show up when training begins or miss 25% (112.5 clock hours) or more of the course may be administratively withdrawn. If that happens, they won't be eligible to rejoin the program for 12 months.

#### What It Takes to Successfully Complete the Program

To earn your Certificate of Completion, here's what you'll need to do:

- 1. Show up and stay engaged --- attend at least 75% of training sessions
- 2. Stay on top of coursework --- complete all assignments and guizzes
- 3. Prioritize safety --- always follow safe practices
- 4. Follow the program guidelines to keep things running smoothly
- 5. Work hard and aim high --- achieve a passing grade of 70% or better

By meeting these requirements, you'll set yourself up for success in the program and beyond.

#### **Grades Recorded on College Non-Credit Transcript**

The following grading system is used to evaluate students:

GRADE RANGE		CONTINUING EDUCATION UNITS	
P (Pass)	70% or Above	45.0	
F (Fail)	69% or Below	00.0	
W (Withdrew)	Not Applicable	00.0	

#### Resources

Staying informed is key to navigating your academic journey with confidence. The section of the college website --- found at <a href="https://www.cccua.edu/community-workforce/continuing-education/index.html">https://www.cccua.edu/community-workforce/continuing-education/index.html</a> --- offers essential details about the College, specifically the Department of Public Services and Workforce Development. This resource provides the most up-to-date information on a wide range of topics, including federal and state policies, College policies, non-credit program management, disability services, student academic integrity, the student code of conduct, graduation requirements, and more.

This online version of the informational resources will be updated, as necessary, to provide you the most current and accurate information available. Therefore, this version should be referenced in order to have the most up to date information. Alternative formats of this information may be received by contacting Continuing Education Services at 800-844-4471.

Students are responsible for staying informed about the content in this resource, as well as other official communications from the College. These communications may be sent via email, USPS mail, written and oral announcements, and web updates. Keeping up with these updates ensures you have the latest information needed for success.

#### **Inclement Weather**

In the event that the area weather is so severe the College feels that life and property may be in danger, classes may be cancelled until weather and road conditions improve. We strive to distribute announcements regarding closures to our students, faculty, and staff in a timely fashion. Announcements regarding College closings will be made through College social media accounts and over the following radio stations: in De Queen KDQN 92.1 and KTYC 88.5 and in Nashville KMTB 99.5 and KBPU 88.7.