

NCWorks Career Pathways

“Partnership to Prepare Pathways”

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Goal

To increase the number and quality, both academic and technical, of work-based learning opportunities for CTE Pathway students in grades 9-14 by utilizing a combination of strategies and constituents providing graduates with competitive skills, credentials, and employment opportunities needed for high demand jobs.

Objectives

- Develop seamless pathways and technical skills of students in CTE programs
- Develop work-based learning opportunities for students in CTE programs
- Develop competitive skills and credentials needed for high demand, high opportunity jobs
- Provide opportunities for job employment

Lenoir Community College



- LCC Career Pathways Coordinator, Chair
- LCC Computer-Integrated Machining Instructor/Program Chair
- LCC Welding Technology Instructor/Program Chair
- LCC High School Programs Coordinator
- LCC Dean of Business, Industry, and Emerging Technologies
- LCC Director of Work-Based Learning and Job Placement
- LCC Senior Vice President of Instruction and Student Services

Lenoir County Public Schools



- LCPS High School Coordinator
- LCPS CTE Coordinator
- LCPS Director of Curriculum Instruction
- LCPS Superintendent

Workforce Development Board



- Executive Director
Eastern Carolina Workforce Development Board
- Director of Workforce Development and Industry Training
Lenoir Community College

Supportive Employers

Machining

- Eaton in LaGrange
- Moen in Kinston
- Pactiv in Kinston
- Precision Hydraulics in Beulaville
- Spirit AeroSystems in Kinston
- West Company in Kinston

Welding

- Crown Forklifts in Kinston
- Waters Industrial Crane in Kinston

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KINSTON-LENOIR COUNTY
**CHAMBER OF
COMMERCE**
Leading the Way



Key Elements

- Employer Engagement
- Programs of Study
- Work-Based Learning (WBL) Opportunities
- WBL *'Promise to interview'*
- Career Advising – Parents, students, faculty, and counselors
- Career Pathways Coordinator

Summary of Curriculum Standards/Pathways

- Course requirements to complete a high school diploma
- Course and hour requirements for completion of a certificate, diploma, or degree
- Opportunities to earn additional college credit with NC High School to Community College Articulated Credit
- Opportunities to complete a certificate, diploma or degree
- Job opportunities for credentials earned and hourly/yearly potential earnings

CAREER & COLLEGE

ready, set,

go!



14 Career Pathways

Accounting

Associate in Arts

Associate in Science

Automotive Customizing

Automotive Systems

Business Administration

Computer Engineering

Computer-Integrated Machining

General Teacher

Networking Technology

Nurse

Sustainable Agriculture

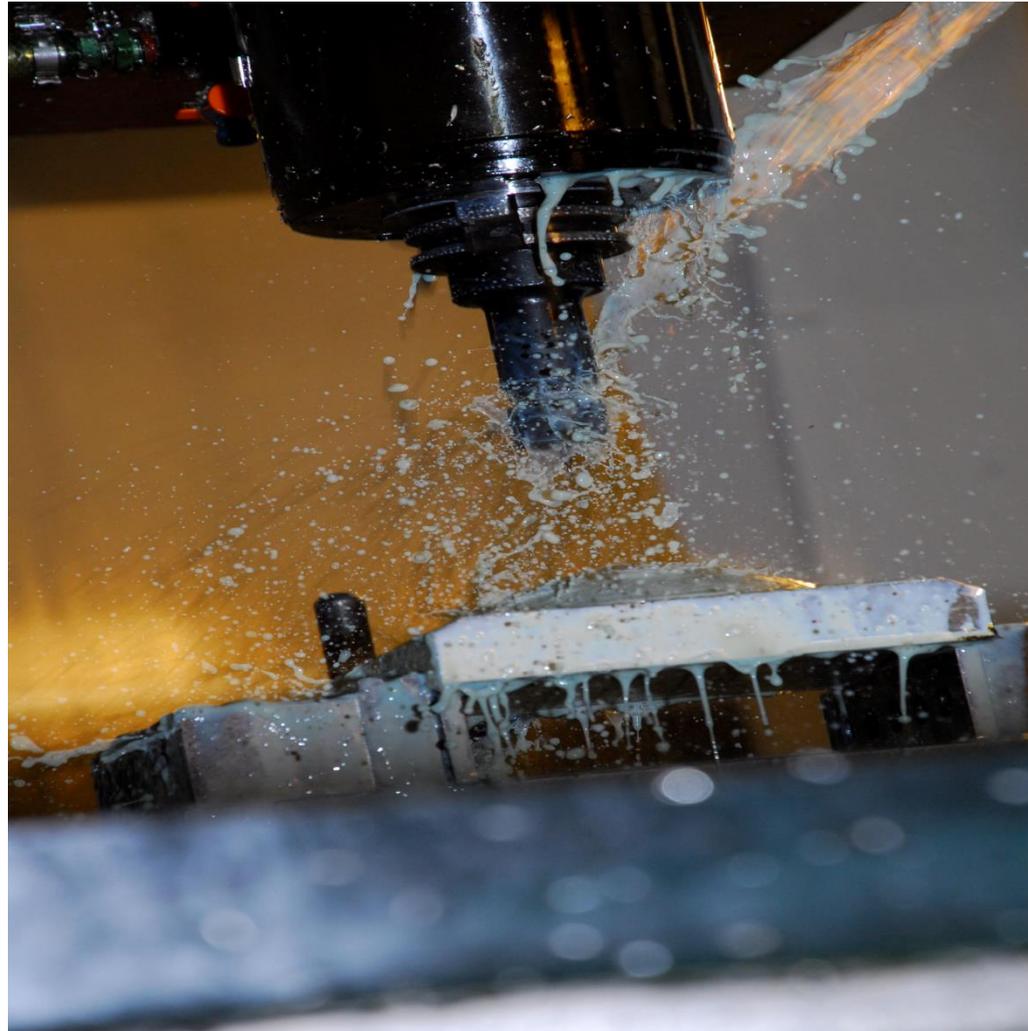
Sustainability Technologies

Welding Technology

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Pathways



PATHWAY: COMPUTER-INTEGRATED MACHINING						ASSOCIATE IN APPLIED SCIENCE				
High School Plan										
SECONDARY	Grade	English/Language Arts Required Course Sequence		Math Required Course Sequence	Science Required Course Sequence	Social Studies Required Course Sequence	Required and Recommended Elective Courses	Grade	Career and Technical Courses	
	9	Fall Semester	English I	Math I		World History	Health/PE	11 Fall		
		Spring Semester	English II	Math II	Earth and Environmental Science	Civics & Economics		11 Spring		
	10	Fall Semester	English III	Math III	Biology or Chemistry	American History I or SS Elective		12 Fall		
		Spring Semester	English IV	One Additional Math	Biology or Chemistry	American History II or AP US History		12 Spring		
	Concentration College Level Courses (Note: Students must meet placement criteria for college transfer courses)									
	11	Fall Semester	ACA 111 College Student Success (1 SHC)	BPR 111 Blueprint Reading (2 SHC)	MAC 171 Measure/Materials & Safety (1 SHC)	MAC 172 Job Plan, Bench & Layout (1 SHC)	MAC 173 Manual Milling/Drilling (2 SHC)	MAC 174 Manual Turning (2 SHC)		
		Spring Semester	MAC 112 Machining Technology II (6 SHC)	MAC 121 Intro to CNC (2 SHC)	ENG 111 Writing and Inquiry (3 SHC) <i>(Placement Required)</i>	MUS 110 Music Appreciation (3 SHC) <i>(Placement Required)</i>				
	12	Fall Semester	MAC 122 CNC Turning (2 SHC)	MAC 124 CNC Milling (2 SHC)	MAC 222 Advanced CNC Turning (2 SHC)	MAC 224 Advanced CNC Milling (2 SHC)				
		Spring Semester	MAC 231 CNC Graphics Program: Turning (3 SHC)	MAC 232 CNC Graphics: Milling (3 SHC)						



Pathways



COMMUNITY COLLEGE PLAN BEYOND HIGH SCHOOL						
POST SECONDARY	Year 13					
	Fall Semester	DFT 119 Basic CAD (2 SHC)	Social/Behavior Science (3 SHC) <i>(Placement Required)</i>	MAC 151 Machining Calculations (2 SHC)	Elective (3 SHC)	ENG 112 Writing/Research (3 SHC) <i>(Placement Required)</i>
	Spring Semester	Electives (6 SHC)	MAT 121 Algebra/Trigonometry (3 SHC) <i>(Placement Required)</i>	MAC 113 Machining Technology (6 SHC)		
	Summer Semester	MAC 233 APPL in CNC Machining (6 SHC)				

ADDITIONAL INFORMATION CONCERNING PATHWAY	
<p>Students may have the opportunity to achieve the following:</p> <ol style="list-style-type: none"> 1. High School Diploma 2. Computer-Integrated Machining Essentials Diploma – D50210K2 3. Computer-Integrated Machining Skills Certificate – C50210K 4. Computer-Integrated Machining Workforce Readiness Certificate – C50210K4 5. Possible NIMS (National Institute of Metalworking Skills) third party credential with successful completion of examination 6. 37 semester hour credits toward AAS degree in Computer-Integrated Machining Technology while in high school 7. Complete an AAS degree in Computer-Integrated Machining Technology within one year after graduation 	<p>OCCUPATIONS: Graduates should qualify for employment as machining technicians in high-tech manufacturing. Rapid prototyping and rapid-manufacturing industries, specialty machine shops, fabrication industries, and high-tech emerging industries such as aerospace, aviation, medical, and renewable energy, and to sit for machining certification examinations.</p> <p>Average Salary: \$19.67 per hour; \$40,910 per year (BLS.gov 2012 Median Pay)</p>

Progress to Date

- Reviewed curriculum standards/pathways
- Reviewed Career and Technical Education (CTE) 16 career clusters
- Developed initial pathways
- Reviewed North Carolina Community College System (NCCCS) Combined Course Library, Curriculum Standards, and programs of study
- Reviewed Department of Labor and NCWorks labor market projections (NCWorks.gov) to determine future demand for occupations
- Met with all counselors and principals in LCPS
- Held parent/student meetings in all 3 high schools

Link to Lenoir County Public Schools

http://www.lenoir.k12.nc.us/index.php?option=com_content&view=article&id=764

Plans for the Future

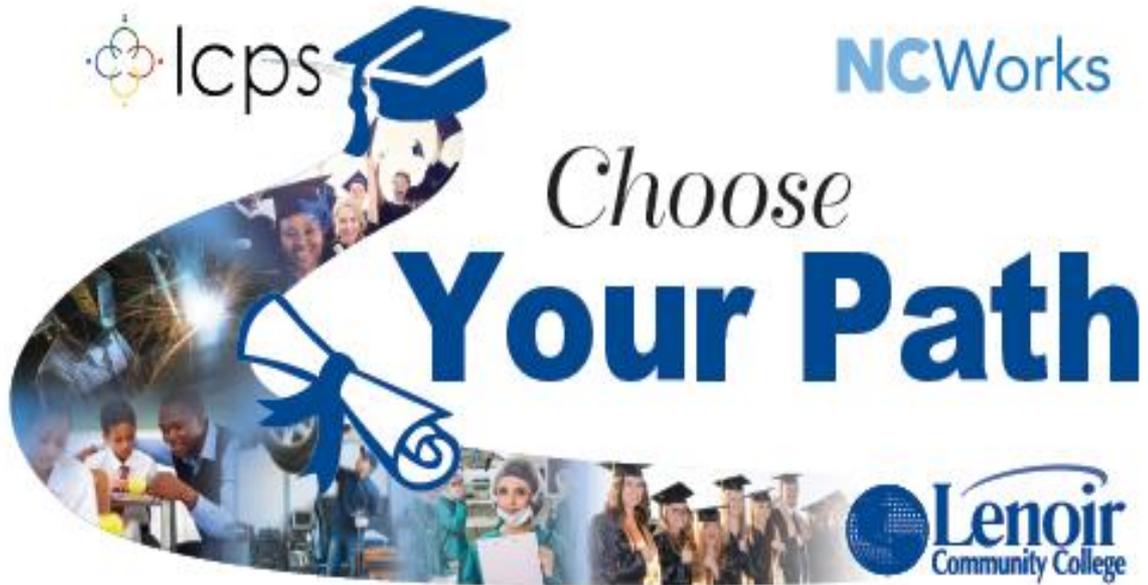
- Involve the Advisory Committee members for each program to get their input into programs, skills, and employer needs
- Collaborate with NCWorks Career Center
- Continue contacting employers for “promise to interview” students who participate in the program and complete a work-based learning opportunity
- Track students in the program to ensure Pathway Career Advising and completion
- Research additional ways to market the program

Plans for the Future

- Develop strategic plan for 2015-2016 including benchmarks, assessment, and action plans
- Develop and maintain individual industry contacts
- Strengthen faculty/employer/student relationships
- Explore implementation of ACA 220 – Professional Transition
- Explore integration of Career Readiness Certificate into curriculum
- Enhance communication among parents, students, faculty, and industry



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Choose

Your Path



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Career Coach

<https://lenoircc.emsicareercoach.com/>