

Programs at Harnett Correctional Institution (HCI)

**Carpentry
Credential: Certificate in Carpentry and Construction Skills; Certificate in Advanced Carpentry Skills
C35180P1; C35180P2**

The Carpentry curriculum is designed to prepare individuals to apply technical knowledge and skills to the fields of construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this program should qualify for entry-level jobs in construction and trades professions as well as positions in industry and government.

Program Length: 1 semester
Career Pathway Options: Diploma in Carpentry (Higher entrance standards required); Certificate in Carpentry
Program Sites: Harnett Correctional Institution-Day Program

Course Requirements for Carpentry and Construction Skills Certificate

I. General Education Academic Core (0 SHC)		
		C-L-SHC
II. Major Hours (17 SHC)		
A. Technical Core (17 SHC)		
BPR 130 Print Reading	3-0-3	
CAR 111 Carpentry I	3-15-8	
CAR 114 Residential Building Codes	3-0-3	
CAR 115 Residential Planning/Estimating	3-0-3	
ISC 110 Workplace Safety	1-0-1	

Total Semester Hours Credit required for graduation: 18

Course Requirements for Advanced Carpentry Skills Certificate

I. General Education Academic Core (0 SHC)		
		C-L-SHC
II. Major Hours (14 SHC)		
A. Technical Core (14 SHC)		
CAR 111 Carpentry II	3-15-8	
CAR 113 Carpentry III	3-9-6	

Total Semester Hours Credit required for graduation: 14

**Electrical Systems Technology
Credential: Certificate in Fundamentals of Electrical Technology; Certificate in Advanced Electrical Skills for Commercial, Residential, and Solar Applications**

C35130P1; C35130P2 This curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial, and industrial facilities.

Coursework, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, programmable logic controllers, industrial motor controls, applications of the National Electric Code, and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical systems.

Program Length: 1 semester
Career Pathway Options: Diploma in Electrical Systems Technology (Higher entrance standards required); Certificate in Electrical Systems Technology
Program Sites: Harnett Correctional Institution-Day Program

Course requirements for Fundamentals of Electrical Technology Certificate

I. General Education Academic Core (0 SHC)		
		C-L-SHC
II. Major Hours (13 SHC)		
A. Technical Core (13 SHC)		
ELC 112 DC/AC Electricity	3-6-5	
ELC 113 Residential Wiring	2-6-4	
ELC 125 Diagrams and Schematics	1-2-2	
ELC 118 National Electrical Code	1-2-2	

Total Semester Hours Credit required for graduation: 13

Course requirements for Advanced Electrical Skills for Commercial, Residential, and Solar Applications

I. General Education Academic Core (0 SHC)		
		C-L-SHC
II. Major Hours (15 SHC)		
A. Technical Core (15 SHC)		
ELC 114 Commercial Wiring	2-6-4	
ELC 117 Motors and Controls	2-6-4	
ELC 122 Advanced Residential Wiring	2-4-4	
ELC 220 Photovoltaic System Technology	2-3-3	

Total Semester Hours Credit required for graduation: 15

Masonry

Credential: Certificate in Masonry Fundamentals; Certificate in Advanced Masonry Skills **C35280P1; C35280P2**

The Masonry curriculum prepares individuals to apply technical knowledge and skills in the laying and/or setting of exterior brick, concrete block, and related materials, using trowels, levels, hammers, chisels, and other hand tools.

Coursework, most of which is hands-on, includes instruction in print reading, structural masonry, decorative masonry, foundations, reinforcement, mortar preparation, cutting and finishing, and applicable codes and standards.

Graduates of this program should qualify for entry-level jobs in construction and trades professions as well as positions in industry and government.

Program Length: 1 semester

Career Pathway Options: Certificate in Masonry
Program Sites: Harnett Correctional Institution-Day Program

Course Requirements for Masonry Fundamentals Certificate

I. General Education Academic Core (0 SHC)	C-L-SHC
II. Major Hours (13 SHC)	
A. Technical Core (13 SHC)	
MAS 110 Masonry I	5-15-10
BPR 130 Print Reading –Construction	3-0-3
ISC 110 Workplace Safety	1-0-1

Total Semester Hours Credit required for graduation: 14

Course Requirements for Advanced Masonry Skills Certificate

I. General Education Academic Core (0 SHC)	C-L-SHC
II. Major Hours (18 SHC)	
A. Technical Core (18 SHC)	
MAS 120 Masonry II	5-10-10
MAS 130 Masonry III	6-6-8

Total Semester Hours Credit required for graduation: 18

Barbering

Credential: Certificate in Barbering **C55110P0**

The Barbering Curriculum is designed to provide competency- based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the barber industry. The curriculum also provides a simulated

environment that enables students to develop manipulative skills.

Coursework includes instruction in all phase of professional barbering, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Barber Examiners. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in barbershops and related businesses.

Program Length: 3 semesters

Career Pathway Option: Certificate in Barbering
Program Site: Harnett Correctional Institution - Day Program

Course Requirements for Barbering Certificate

I. General Education Academic Core (0 SHC)	C-L-SHC
II. Major Hours (41 SHC)	
A. Technical Core (41 SHC)	
BAR 111 Barbering Concepts I	4-0-4
BAR 112 Barbering Clinic I	0-24-8
BAR 113 Barbering Concepts II	4-0-4
BAR 114 Barbering Clinic II	0-24-8
BAR 115 Barbering Concepts III	4-0-4
BAR 116 Barbering Clinic III	0-12-4
BAR 117 Barbering Concepts IV	2-0-2
BAR 118 Barbering Clinic IV	0-21-7

Total Semester Hours Credit required for graduation: 41

Food Service Technology

Credential: Certificate in Foodservice Technology **C55250P1**

This curriculum is designed to introduce students to the foodservice industry and prepare them for entry level positions in industrial, institutional or commercial production foodservice operations.

Courses include sanitation, basic and intermediate foodservice production skills, baking, menus, purchasing and basic cost control.

Graduates should qualify for employment as line cooks, prep cooks, or bakers in production foodservice settings or entry-level kitchen management in an institutional foodservice setting.

Program Length: 1 semester

Career Pathway Options: Certificate in Foodservice Technology

Program Site: Harnett Correctional Institution-Day Program

Course Requirements for Certificate in Foodservice Technology

I. General Education Academic Core (0 SHC)			C-L-SHC
II. Major Hours (17 SHC)			
A. Technical Core (17 SHC)			
FST 100	Introduction to Foodservice		3-0-3
FST 101	Introduction to Baking		1-4-3
FST 102	Basic Foodservice Skills		4-8-8
FST 103	Foodservice Sanitation		2-0-2
FST 103A	Foodservice Sanitation Lab		0-2-1

Total Semester Hours Credit required for graduation: 17

**Small Engine and Equipment Repair
Credential: Certificate in Small Engine and Equipment Repair
C60280P**

The Small Engine and Equipment Repair curriculum is designed to prepare individuals with the knowledge and skills needed to service, troubleshoot, and repair small engine-powered equipment. Shop experience is used to provide the skills to service, repair, or rebuild small engines. Students will be able to disassemble, repair, reassemble, and test small engines and equipment, to include the carburetor, electrical, transmissions, transaxls, and belt/pulley/chain drive systems.

The coursework includes safety practices, wiring diagrams, mechanical schematics, and the use of technical manuals.

Graduates should qualify for employment as small engine mechanics at small engine service and repair or rental shops, outdoor power equipment dealers, recreational vehicles dealers, and landscaping and grounds maintenance service centers. Other employment may be available in the agriculture and construction industry.

Program Length: 1 semester
Career Pathway Options: Certificate in Small Engine and Equipment Repair
Program Site: Harnett Correctional Institution-Day Program

Course Requirements for Small Engine and Equipment Repair

I. General Education Academic Core (0 SHC)			C-L-SHC
II. Major Hours (14 SHC)			
A. Technical Core (14 SHC)			
PME 101	Small Engine Repair I		1-15-6
PME 103	Small Engine Carburetion		1-9-4
PME 106	Small Engine Transmissions		2-6-4

Total Semester Hours Credit required for graduation: 14

**Welding Technology
Credential: Certificate in Welding Fundamentals; Certificate in MIG, TIG, and Fabrication
C50420P1; C50420P2**

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metalworking industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses may include math, print reading, metallurgy, welding inspection, and destructive and non-destructive testing providing the student with industry-standard skills developed through classroom training and practical application.

Graduates of the Welding Technology curriculum may be employed as entry-level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

Program Length: 1 semester
Career Pathway Options: Certificate in Welding Technology
Program Site: Harnett Correctional Institution-Day Program

Course Requirements for Welding Fundamentals Certificate

I. General Education Academic Core (0 SHC)			C-L-SHC
II. Major Hours (15 SHC)			
A. Technical Core (15 SHC)			
WLD 110	Cutting Processes		1-3-2
WLD 115	SMAW (Stick) Plate		2-9-5
WLD 116	SMAW (Stick) Plate/Plate		1-9-4
WLD 141	Symbols and Specifications		2-2-3
ISC 110	Workplace Safety		1-0-1

Total Semester Hours Credit required for graduation: 15

Course Requirements for MIG, TIG, and Fabrication

I. General Education Academic Core (0 SHC)			C-L-SHC
II. Major Hours (16 SHC)			
A. Technical Core (16 SHC)			
WLD 121	GMAW (MIG) FCAW/Plate		2-6-4
WLD 131	GMAW (TIG)		2-6-4
WLD 151	Fabrication I		2-6-4
WLD 262	Inspection and Testing		2-2-3

Total Semester Hours Credit required for graduation: 15