C. Other Required Major Hours (22 SHC)

CIS 110	Introduction to Computers	2-2-3
	Or	
CIS 111	Basic PC Literacy	1-2-2
EDU 146	Child Guidance	3-0-3
EDU 153	Health, Safety, and Nutrition	3-0-3
EDU 243	Learning Theory	3-0-3
EDU 257	Instructional Strategies/Math	3-0-3
EDU 258	Instructional Strategies/Science	3-0-3
EDU 275	Effective Teacher Training	2-0-2
EDU 281	Instructional Strategies/Reading & Writing	3-0-3

Total Semester Hours Credit Required for Graduation: 65

Semester Curriculum for School-Age Education Associate Degree

1st Semester (Fall)		C-L-SHC
CIS 110	Introduction to Computers	2-2-3
	Or	
CIS 111	Basic PC Literacy	1-2-2
EDU 131	Child, Family, & Community	3-0-3
EDU 144	Child Development I	3-0-3
EDU 163	Classroom Management & Instruction	3-0-3
ENG 111	Expository Writing	3-0-3
ENG 111A	Expository Writing Lab	0-2-1
		13-4-15

2nd Semester (Spring)		
EDU 118	Principles and Practices of Inst. Assistant	3-0-3
EDU 145	Child Development II	3-0-3
EDU 146	Child Guidance	3-0-3
EDU 153	Health, Safety, and Nutrition	3-0-3
	Communications Elective	3-0-3
		15-0-15

3rd Semester (Summer)		
EDU 221	Children with Exceptionalities	3-0-3
	Humanities/Fine Arts Elective	3-0-3
		6-0-6

4th Semester (Fall)		
EDU 257	Instructional Strategies/Math	3-0-3
EDU 258	Instructional Strategies/Science	3-0-3
EDU 275	Effective Teacher Training	2-0-2
EDU 281	Instructional Strategies/Reading & Writing	3-0-3
*MAT 140	Survey of Mathematics	3-0-3
		14-0-14

5th Semester (Spring)		
EDU 243	Learning Theory	3-0-3
EDU 271	Educational Technology	2-2-3
EDU 285	Internship Experience School Age	1-9-4
EDU 289	Adv. Issues/School-Age	2-0-2
	Social/Behavioral Science Elective	3-0-3
		11-11-16

* Students may substitute MAT 115 or PHY 121 (nontransferable).

Total Semester Hours Credit: 65

Transport Systems Technologies

Automotive Restoration Technology
Credential: Diploma in Automotive Restoration Technology
D6014000

The Automotive Restoration Technology curriculum is designed to provide individuals with the competencies needed to work in the automotive restoration industry. The coursework includes research and application of information on specific components of a wide range of classic vehicles (1900 – 1970), such as internal combustion engines, transmissions, brakes, sheet metal, upholstery, starters, generators, and related systems. Graduates of the curriculum should qualify for entry-level employment opportunities in the automotive restoration industry.

Program Length: 3 semesters
Career Pathway Options: Diploma in Automotive Restoration Technology
Program Sites: Lee Campus - Day Program

Course Requirements for Automotive Restoration Technology Diploma

A. General Education Courses (6 SHC)		C-L-SHC
ENG 102	Applied Communication II	3-0-3
MAT 101	Applied Mathematics I	2-2-3

B. Required Major Core Courses (31 SHC)		
ARS 101	Introduction to Auto Restoration	2-0-2
ARS 102	Auto Restoration Research	3-0-3
ARS 103	Automobile Upholstery	2-4-4
ARS 104	Restorative Skills I	2-4-4
ARS 107	Automotive Engines	1-3-2
ARS 108	Wood and Metal Restoration	2-2-3
ARS 131	Chassis and Drive Trains	2-3-3
ARS 161	Electrical Systems Fundamentals	2-6-4
AUB 134	Auto Body MIG Welding	1-4-3
AUB 141	Mechanical and Electrical Components I	2-2-3

C. Other Major Hours Required for Graduation (11 SHC)		
AUB 111	Painting and Refinishing I	2-6-4
AUB 112	Painting and Refinishing II	2-6-4
AUB 121	Non-Structural Damage I	1-4-3

Total Semester Hours Credit required for graduation: 48

Semester Curriculum for Automotive Systems Technology Diploma

1st Semester (Fall)		C-L-SHC
ARS 101	Introduction to Auto Restoration	2-0-2
ARS 107	Automotive Engines	1-3-2
ARS 108	Wood and Metal Restoration	2-2-3
ARS 161	Electrical Systems Fundamentals	2-6-4
AUB 111	Painting and Refinishing I	2-6-4
AUB 121	Non-Structural Damage I	1-4-3
		10-21-18

2nd Semester (Spring)

ARS 102	Auto Restoration Research	3-0-3
ARS 103	Automobile Upholstery	2-4-4
ARS 131	Chassis and Drive Trains	2-3-3
AUB 112	Painting and Refinishing II	2-6-4
AUB 141	Mechanical and Electrical Components I	2-2-3
ENG 102	Applied Communication II	3-0-3
		14-15-20

3rd Semester (Summer)

ARS 104	Restorative Skills I	2-4-4
AUB 134	Auto Body MIG Welding	1-4-3
MAT 101	Applied Mathematics I	2-2-3
		5-10-10

Total Semester Hours Credit (SHC): 48

Automotive Restoration Technology Credential: Certificate in Automotive Restoration Technology C60140

The Automotive Restoration Technology curriculum is designed to provide individuals with the skills needed to work in an entry-level position in the automotive restoration industry. The coursework includes research and application of information on specific components of vehicles such as engines, sheet metal, auto body and painting. Graduates of the curriculum should qualify for entry-level employment opportunities in the automotive restoration industry.

Program Length: 3 semesters
Career Pathway Options: Diploma in Automotive Restoration Technology (Higher entrance standards required); Certificate in Automotive Restoration Technology
Program Sites: Lee Campus - Evening Program

Course Requirements for Automotive Restoration Technology Certificate

Major Hours Required for Graduation (16 SHC)

ARS 101	Introduction to Auto Restoration	2-0-2
AUB 111	Painting and Refinishing I	2-6-4
AUB 112	Painting and Refinishing II	2-6-4
AUB 121	Non-Structural Damage I	1-4-3
AUB 141	Mechanical and Electrical Components I	2-2-3

Total Semester Hours Credit required for graduation: 16

Semester Curriculum for Automotive Restoration Technology Certificate

1st Semester (Fall)   C-L-SHC

ARS 101	Introduction to Automotive Rest	2-0-2
AUB 111	Painting and Refinishing I	2-6-4
		4-6-6

2nd Semester (Spring)

AUB 121	Non-Structural Damage I	1-4-3
AUB 112	Painting and Refinishing II	2-6-4
		3-10-7

3rd Semester (Fall)

AUB 141	Mechanical and Electrical Components I	2-2-3
		2-2-3

Total Semester Hours Credit: 16

Automotive Systems Technology
Credential: Associate in Applied Science Degree in Automotive Systems Technology
A60160

This curriculum prepares individuals for employment as automotive service technicians. It provides an introduction to automotive careers and enhances the student's awareness of having to meet the challenges of this fast and ever-changing field. Classroom and lab experiences integrate technical and academic coursework. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains.

Upon completion of this curriculum students should be prepared for ASE certification and be ready for full-time employment in dealerships and repair shops in the automotive service industry. Cooperative education opportunities may be available at some North Carolina Community Colleges.

Program Length: 5 semesters
Career Pathway Options: Associate in Applied Science Degree in Automotive Systems Technology
Program Sites: Lee Campus - Day Program

Course Requirements for Automotive Systems Technology Degree

A. General Education Courses (15/17 SHC)		C-L-SHC
ENG 110	Freshman Composition	3-0-3
	OR	
ENG 111	Expository Writing	3-0-3
	AND	
ENG 111A	Expository Writing Lab	0-2-1
ENG 114	Professional Research and Reporting	3-0-3
	OR	
ENG 116	Technical Report Writing	3-0-3
	Humanities/Fine Arts Elective	3-0-3
MAT 115	Mathematical Models	2-2-3
	Or	
PHY 121	Applied Physics I	3-2-4
	Social/Behavioral Science Elective	3-0-3

B. Required Major Core Courses (18 SHC)		
AUT 141	Suspension and Steering Systems	2-3-3
AUT 151	Brake Systems	2-3-3
AUT 161	Electrical Systems	4-3-5
AUT 181	Engine Performance I	2-3-3
AUT 183	Engine Performance II	2-6-4

C. Other Major Hours Required for Graduation (42/43 SHC)		
AUT 110	Intro to Auto Technology	2-2-3
AUT 114	Safety and Emissions	1-2-2
AUT 114A	Safety and Emissions Lab	0-2-1
AUT 116	Engine Repair	2-3-3

AUT 116A	Engine Repair Lab	0-3-1
AUT 141A	Suspension and Steering Lab	0-3-1
AUT 151A	Brake Systems Lab	0-3-1
AUT 163	Adv Automotive Electricity	2-2-3
AUT 163A	Adv Automotive Electricity Lab	0-3-1
AUT 171	Auto Climate Control	2-4-4
AUT 181A	Engine Performance Lab	0-3-1
AUT 212	Auto Shop Management	3-0-3
AUT 221	Auto Transm/Transaxles	2-3-3
AUT 221A	Auto Transm/Transaxles Lab	0-3-1
AUT 231	Manual Trans/Axles/Drtrains	2-3-3
AUT 231A	Manual Trans/Axles/Drtrains Lab	0-3-1
AUT 281	Advanced Engine Performance	2-2-3
AUT 283	Advanced Auto Electronics	2-2-3
CIS 111	Basic PC Literacy	1-2-2
	OR	
AUT186	PC Skills for Auto Techs	2-2-3
WLD 112	Basic Welding Processes	1-3-2

Total Semester Hours Credit required for graduation: 75/78

Semester Curriculum for Automotive Systems Technology Degree

1st Semester (Fall)		C-L-SHC
AUT 110	Intro into Auto Technology	2-2-3
AUT 141	Suspension & Steering Systems	2-3-3
AUT 141A	Suspension & Steering Systems Lab	0-3-1
AUT 161	Basic Auto Electricity	4-3-5
CIS 111	Basic PC Literacy	1-2-2
	OR	
AUT 186	PC Skills for Auto Techs	2-2-3
MAT 115	Mathematical Models	2-2-3
	Or	
PHY 121	Applied Physics I	3-2-4
		11/13-15-17/19

2nd Semester (Spring)		
AUT 151	Brake Systems	2-3-3
AUT 151A	Brake Systems Lab	0-3-1
AUT 163	Adv Auto Electricity	2-3-3
AUT 163A	Adv Auto Electricity Lab	0-3-1
AUT 181	Engine Performance I	2-3-3
AUT 181A	Engine Performance I Lab	0-3-1
ENG 110	Freshman Composition	3-0-3
	OR	
ENG 111	Expository Writing	3-0-3
	AND	
ENG 111A	Expository Writing Lab	0-2-1
		9-18/20-15/16

3rd Semester (Summer)		
AUT 114	Safety and Emissions	1-2-2
AUT 114A	Safety and Emissions Lab	0-2-1
AUT 171	Auto Climate Control	2-4-4
AUT 183	Engine Performance II	2-6-4
		5-14-11

4th Semester (Fall)

AUT 116	Engine Repair	2-3-3
AUT 116A	Engine Repair Lab	0-3-1
AUT 212	Auto Shop Management	3-0-3
AUT 231	Manual Drive Train/Axles	2-3-3
AUT 231A	Manual Trans/Axles/Drtrains Lab	0-3-1
ENG 114	Professional Research and Reporting OR	3-0-3
ENG 116	Technical Report Writing	3-0-3
WLD 112	Basic Welding Processes	1-3-2
		11-15-16

5th Semester (Spring)

AUT 221	Auto Transm/Transaxles	2-3-3
AUT 221A	Auto Transm/Transaxles Lab	0-3-1
AUT 281	Advanced Engine Performance	2-2-3
AUT 283	Advanced Auto Electronics	2-2-3
	Humanities Elective	3-0-3
	Social Science Elective	3-0-3
		12-10-16

Total Semester Hours Credit: 75/78

Automotive Systems Technology Credential: Diploma in Automotive Systems Technology D60160

This curriculum prepares individuals for employment as automotive service technicians. It provides an introduction to automotive careers and enhances the student's awareness of having to meet the challenges of this fast and ever-changing field. Classroom and lab experiences integrate technical and academic coursework. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains.

Upon completion of this curriculum students should be prepared for ASE certification and be ready for full-time employment in dealerships and repair shops in the automotive service industry. Cooperative education opportunities may be available at some North Carolina Community Colleges.

Program Length: 3 semesters
Career Pathway Options: Associate in Applied Science Degree in Automotive Systems Technology (Higher entrance standards required); Diploma in Automotive Systems Technology
Program Sites: Lee Campus - Day Program

Course Requirements for Automotive Systems Technology Diploma

A. General Education Courses (6/7 SHC)		C-L-SHC
*ENG 102	Applied Communication II	3-0-3
*MAT 101	Applied Mathematics I Or	2-2-3
PHY 121	Applied Physics I	3-2-4

B. Required Major Core Courses (18 SHC)		
AUT 141	Suspension and Steering Systems	2-3-3
AUT 151	Brake Systems	2-3-3
AUT 161	Basic Auto Electricity	4-3-5
AUT 181	Engine Performance I	2-3-3
AUT 183	Engine Performance II	2-6-4

C. Other Major Hours Required for Graduation (19/20 SHC)		
AUT 110	Intro to Auto Technology	2-2-3
AUT 114	Safety and Emissions	1-2-2
AUT 114A	Safety and Emissions Lab	0-2-1
AUT 141A	Suspension and Steering Lab	0-3-1
AUT 151A	Brake Systems Lab	0-3-1
AUT 163	Advanced Auto Electricity	2-3-3
AUT 163A	Advanced Auto Electricity Lab	0-3-1
AUT 171	Auto Climate Control	2-4-4
AUT 181A	Engine Performance I Lab	0-3-1
AUT 186	PC Skills for Auto Techs OR	2-2-3
CIS 111	Basic PC Literacy	1-2-2

*These courses are not transferable to the Associate in Applied Science Degree.

Total Semester Hours Credit required for graduation: 43/45

Semester Curriculum for Automotive Systems Technology Diploma

1st Semester (Fall)		C-L-SHC
AUT 110	Intro to Auto Technology	2-2-3
AUT 141	Suspension & Steering Sys	2-3-3
AUT 141A	Suspension & Steering Sys Lab	0-3-1
AUT 161	Basic Auto Electricity	4-3-5
AUT 186	PC Skills for Auto Techs	2-2-3
	OR	
CIS 111	Basic PC Literacy	1-2-2
*MAT 101	Applied Mathematics I	2-2-3
	OR	
PHY 121	Applied Physics I	3-2-4
		11/13-15-17/19

2nd Semester (Spring)		
AUT 151	Brake Systems	2-3-3
AUT 151A	Brake Systems Lab	0-3-1
AUT 163	Advanced Auto Electricity	2-3-3
AUT 163A	Advanced Auto Electricity Lab	0-3-1
AUT 181	Engine Performance I	2-3-3
AUT 181A	Engine Performance I Lab	0-3-1
*ENG 102	Applied Communication II	3-0-3
		9-18-15

3rd Semester (Summer)		
AUT 114	Safety and Emissions	1-2-2
AUT 114A	Safety and Emissions Lab	0-2-1
AUT 171	Auto Climate Control	2-4-4
AUT 183	Engine Performance-Fuels	2-6-4
		5-14-11

*These courses are not transferable to the Associate in Applied Science Degree.

Total Semester Hours Credit: 43/45

Automotive Systems Technology
Credential: Certificate in Automotive Systems Technology
C60160

This curriculum prepares individuals for employment as automotive service technicians. It provides an introduction to automotive careers and enhances the student's awareness of having to meet the challenges of this fast and ever-changing field. Courses include both classroom and lab experiences. Emphasis is placed on theory, servicing and operation of electrical/electronic systems. Upon completion of this curriculum, students should be prepared for ASE electrical certification and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

Program Length: 2 semesters
Career Pathway Options: Associate in Applied Science Degree in Automotive Systems Technology (Higher entrance standards required); Diploma in Automotive Systems Technology (Higher entrance standards required); Certificate in Automotive Systems Technology
Program Sites: Lee Campus - Evening Program

Course Requirements for Automotive Systems Technology Certificate

A. Required Subject Areas (8 SHC)		C-L-SHC
AUT 161	Basic Auto Electricity	4-3-5
AUT 181	Engine Performance I	2-3-3

B. Other Major Hours Required for Graduation (8 SHC)		
AUT 163	Advanced Auto Electricity	2-3-3
AUT 163A	Advanced Auto Electricity Lab	0-3-1
AUT 181A	Engine Performance I Lab	0-3-1
AUT 283	Advanced Auto Electronics	2-2-3

Total Semester Hours Credit required for graduation: 16

Semester Curriculum for Automotive Systems Technology Certificate

1st Semester (Fall)		C-L-SHC
AUT 161	Basic Auto Electricity	4-3-5
		4-3-5

2nd Semester (Spring)		
AUT 163	Advanced Auto Electricity	2-3-3
AUT 163A	Advanced Auto Electricity Lab	0-3-1
AUT 181	Engine Performance I	2-3-3
AUT 181A	Engine Performance I Lab	0-3-1
AUT 283	Advanced Auto Electronics	2-2-3
		6-14-11

Total Semester Hours Credit: 16

Motorcycle Mechanics
Credential: Diploma in Motorcycle Mechanics
D60260

This curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair and/or adjust motorcycles, and all terrain vehicles (ATV). Coursework, including a thorough understanding of the operating principles involved in modern motorcycles, will be presented in class assignments, discussion, demonstration and shop practice. Graduates receiving a diploma may find employment with motorcycle dealers, independent repair shops or may set up their own business after they have developed skills in the trade.

Program Length: 3 semesters
Career Pathway Options: Diploma in Motorcycle Mechanics
Program Sites: Lee Campus - Day Program

Course Requirements for Motorcycle Mechanics Diploma

A. General Education Courses (6 SHC)		C-L-SHC
ENG 102	Applied Communication II	3-0-3
MAT 101	Applied Math I	2-2-3

B. Required Major Core Courses (38 SHC)		
BUS 230	Small Business Management	3-0-3
MCM 101	Introduction to Motorcycle Mech.	3-8-7
MCM 102	Motorcycle Engines	2-9-5
MCM 103	Motorcycle Electrical Systems	2-8-6
MCM 104	Motorcycle Fuel Systems	2-6-5
MCM 105	Motorcycle Chassis	1-6-3
MCM 106	Troubleshooting	2-6-4
MEC 111	Machine Processes I	1-4-3
WLD 112	Basic Welding Processes	1-3-2

C. Other Major Hours required for graduation (2 SHC)		
CIS 111	Basic PC Literacy	1-2-2

Total Semester Hours Credit required for graduation: 46

Semester Curriculum for Motorcycle Mechanics Diploma

1st Semester (Summer)		C-L-SHC
BUS 230	Small Business Management	3-0-3
MCM 101	Introduction to Motorcycle Mech.	3-8-7
		6-8-10

2nd Semester (Fall)		
CIS 111	Basic PC Literacy	1-2-2
MAT 101	Applied Math I	2-2-3
MCM 102	Motorcycle Engines	2-9-5
MCM 103	Motorcycle Electrical Systems	2-8-6
WLD 112	Basic Welding Procedures	1-3-2
		8-24-18

3rd Semester (Spring)		
ENG 102	Applied Communication II	3-0-3
MCM 104	Motorcycle Fuel Systems	2-6-5
MCM 105	Motorcycle Chassis	1-6-3
MCM 106	Troubleshooting	2-6-4
MEC 111	Machine Processes I	1-4-3
		9-22-18

Total Semester Hours Credit: 46

Motorcycle Mechanics Credential: Certificate in Motorcycle Mechanics C60260

This curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair and/or adjust motorcycles, and all terrain vehicles (ATV). Coursework, including a thorough understanding of the operating principles involved in modern motorcycles, will be presented in class assignments, discussion, demonstration and shop practice.

Program Length: 2 semesters
Career Pathway Options: Diploma in Motorcycle Mechanics (Higher entrance standards required); Certificate in Motorcycle Mechanics
Program Sites: Lee Campus - Evening Program

Course Requirements for Motorcycle Mechanics Certificate

		C-L-SHC
A. Required Major Courses (12 SHC)		
MCM 101	Introduction to Motorcycle Mechanics	3-8-7
MCM 102	Motorcycle Engines	2-9-5

Total Semester Hours Credit required for graduation: 12

Semester Curriculum for Motorcycle Mechanics Certificate

1st Semester (Fall)		C-L-SHC
MCM 101	Introduction to Motorcycle Mechanics	3-8-7

2nd Semester (Spring)		
MCM 102	Motorcycle Engines	2-9-5

Total Semester Hours Credit: 12

Programs at Harnett Correctional Institution (HCI)

Public Service Technologies

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 Examiners. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in barbershops and related businesses.

Entrance Standards: See General Admission Standards in catalog
Academic Standards: See General Academic Standards in catalog
Program Length: 3 semesters
Career Pathway Option: Certificate in Barbering
Program Site: Harnett Correctional Institution - Day Program

Course Requirements for Barbering Certificate

A. Required Major Core Courses (32 SHC)		
		C-L-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

B. Other Major Hours Required for Graduation (9 SHC)		
		C-L-SHC
BAR 117	Barbering Concepts IV	2-0-2
BAR 118	Barbering Clinic IV	0-21-7

Total Semester Hours Credit Required for Graduation: 41

Semester Curriculum for Barbering Certificate

1st Semester (Fall)		
		C-L-SHC
BAR 111	Barbering Concepts I	4-0-4
BAR 112	Barbering Clinic I	0-24-8
BAR 117	Barbering Concepts IV	2-0-2
BAR 118A	Barbering Clinic IV	0-9-3