

Broadcast Production Technology Credential: Video/TV Production Certificate C3012020

This certificate program is designed for individuals interested in film, video, shot composition, lighting, production planning, scripting, editing, and operation of video and television production equipment and related software for broadcast and/or other electronic media applications.

Emphasis is placed on techniques followed in producing all forms of video and television production. Upon completion students should be able to produce basic video and television productions in a team environment, operate the college television studio and/or cable channels, and show improvement and aptitude in proper articulation and pronunciation.

Program Length: 2 semesters

Program Site: Lee Main Campus – Day Program

Course requirements for Video/TV Production Certificate:

| 1. Other Major Requirements (16 SHC) | | C-L-SHC |
|--------------------------------------|------------------------|---------|
| BPT 121 | Broadcast Speech I | 2-3-3 |
| BPT 122 | Broadcast Speech II | 2-3-3 |
| BPT 231 | Video/TV Production I | 2-6-4 |
| BPT 232 | Video/TV Production II | 2-6-4 |
| BPT 235 | TV Performance I | 0-6-2 |

Total Semester Hours Credit Required for Graduation: 16

Broadcast Production Technology Credential: Podcasting & Digital Audio Production Certificate C3012030

This certificate program is designed for individuals interested in development, production, and presentation of audio programming elements for podcasts, broadcast and/or other electronic media applications, in addition to social media for organizations. Emphasis is placed on the proper operation of professional audio equipment, related software, and the utilization of popular social media platforms. Upon completion, students should be able to correctly operate audio recording and playback equipment, show improvement and aptitude in proper articulation and pronunciation, plus work with social marketing and media analytics tools.

Program Length: 2 semesters

Program Sites: Lee Main Campus – Day Program, Selected courses; Harnett Campus – Day Program, Selected courses

Course requirements for Podcasting & Digital Audio Production Certificate:

| 1. Major Requirement (3 SHC) | | C-L-SHC |
|------------------------------|------------------------------|---------|
| BPT 110 | Introduction to Broadcasting | 3-0-3 |

2. Other Major Requirements (11 SHC)

| | | |
|---------|---------------------------|-------|
| BPT 131 | Audio/Radio Production I | 2-6-4 |
| BPT 132 | Audio/Radio Production II | 2-6-4 |
| WEB 214 | Social Media | 2-2-3 |

Total Semester Hours Credit required for graduation: 14

Construction Technologies

Air Conditioning, Heating, and Refrigeration Technology

Credential: Associate in Applied Science in Air Conditioning, Heating, & Refrigeration Degree A35100

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems. Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the AAS degree covers residential building codes, residential system sizing, and advanced comfort systems. AAS degree graduates should be able to demonstrate an understanding of system selection and balance and advanced systems.

Program Length: 6 semesters

Program Location: Center for Workforce Innovation/Howard James Industry Training Center

Course requirements for Air Conditioning, Heating, and Refrigeration Technology Degree

| 1. General Education Requirements (15 SHC) | | C-L-SHC |
|--|-------------------------------|---------|
| English – Take one course: | | |
| ENG 110 | Freshman Composition | 3-0-3 |
| ENG 111 | Writing & Inquiry | 3-0-3 |
| Communications – Take one course: | | |
| COM 110 | Introduction to Communication | 3-0-3 |
| COM 120 | Intro Interpersonal Com | 3-0-3 |
| COM 231 | Public Speaking | 3-0-3 |
| ENG 112 | Writing/Research in the Disc | 3-0-3 |
| ENG 114 | Prof Research & Reporting | 3-0-3 |
| ENG 115 | Oral Communication | 3-0-3 |
| ENG 116 | Technical Report Writing | 3-0-3 |
| Mathematics/Sci – Take one course: | | |
| MAT 110 | Math Measurement & Literacy | 2-2-3 |
| MAT 143 | Quantitative Literacy | 2-2-3 |
| PHY 121 | Applied Physics I | 3-2-4 |
| Humanities/Fine Arts requirement | | 3 |
| Social/Behavioral Science requirement | | 3 |

2. Major Requirements (29 SHC)

| | | |
|---------|------------------------|-------|
| AHR 110 | Intro to Refrigeration | 2-6-5 |
| AHR 111 | HVACR Electricity | 2-2-3 |
| AHR 112 | Heating Technology | 2-4-4 |
| AHR 113 | Comfort Cooling | 2-4-4 |

| | | |
|---------|---------------------------|-------|
| AHR 114 | Heat Pump Technology | 2-4-4 |
| AHR 180 | HVAC Customer Relations | 1-2-2 |
| AHR 211 | Residential System Design | 2-2-3 |
| AHR 212 | Advanced Comfort Systems | 2-6-4 |
| AHR 213 | HVACR Building Code | 1-2-2 |

3. Other Major Requirements (20 SHC)

| | | |
|---------|---------------------------|-------|
| AHR 115 | Refrigeration Systems | 1-3-2 |
| AHR 125 | HVACR Electronics | 2-2-3 |
| AHR 133 | HVAC Servicing | 2-6-4 |
| AHR 151 | HVAC Duct Systems I | 1-3-2 |
| AHR 160 | Refrigerant Certification | 1-0-1 |
| AHR 180 | HVACR Customer Relations | 1-0-1 |
| AHR 215 | Commercial HVAC Controls | 1-3-2 |
| AHR 225 | Commercial System Design | 2-3-3 |

4. Other Requirements (1 SHC)

| | | |
|------------------------------------|--------------------------|--------|
| WBL 111 | Work-Based Learning I | 0-10-1 |
| Student Success - Take one course: | | |
| ACA 111 | College Student Success | 1-0-1 |
| ACA 115 | Success & Study Skills | 0-2-1 |
| ACA 122 | College Transfer Success | 0-2-1 |

Total Semester Hours Credit required for graduation: 65

**Electrical Systems Technology
Credential: Associate in Applied Science in
Electrical Systems Technology
A35130**

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: 5 semesters
Program Location: Chatham Main Campus

Course requirements for Electrical Systems Technology Degree:

| | | |
|--------------------------------------|--------------------------------|---------|
| 1. General Education (15 SHC) | | C-L-SHC |
| English – Take one course: | | |
| ENG 110 | Freshman Composition | 3-0-3 |
| ENG 111 | Writing & Inquiry | 3-0-3 |
| Communications – Take one course: | | |
| COM-110 | Introduction to Communications | 3-0-3 |
| COM 120 | Intro Interpersonal Com | 3-0-3 |
| COM 231 | Public Speaking | 3-0-3 |

| | | |
|---------------------------------------|------------------------------|-------|
| ENG 112 | Writing/Research in the Disc | 3-0-3 |
| ENG 114 | Prof Research & Reporting | 3-0-3 |
| ENG 115 | Oral Communication | 3-0-3 |
| Mathematics – Take one course: | | |
| MAT 110 | Math Measurement & Literacy | 2-2-3 |
| MAT 143 | Quantitative Literacy | 2-2-3 |
| PHY 121 | Applied Physics | 3-2-4 |
| Humanities/Fine Arts requirement | | |
| Social/Behavioral Science Requirement | | |

2. Major Requirements (16 SHC)

| | | |
|---------|---------------------|-------|
| ELC 112 | DC/AC Electricity | 3-6-5 |
| ELC 113 | Residential Wiring | 2-6-4 |
| ELC 117 | Motors and Controls | 2-6-4 |
| ELC 128 | Intro to PLC | 2-3-3 |

Concentration Requirements (12 SHC)

| | | |
|---------|--------------------------|-------|
| ELC 114 | Commercial Wiring | 2-6-4 |
| ELC 115 | Industrial Wiring | 2-6-4 |
| ELC 118 | National Electrical Code | 1-2-2 |
| ELC 119 | NEC Calculations | 1-2-2 |

3. Other Major Requirements (21 SHC)

| | | |
|---------|------------------------------|-------|
| ALT 120 | Renewable Energy Tech | 2-2-3 |
| BPR 130 | Print Reading – Construction | 3-0-3 |
| BUS 110 | Intro to Business | 3-0-3 |
| ELC 121 | Electrical Estimating | 1-2-2 |
| ELC 127 | Software for Technicians | 1-3-2 |
| ELC 134 | Transformer Applications | 1-2-2 |
| ELC 220 | Photovoltaic Sys Tech | 2-3-3 |
| ISC 121 | Envir Health & Safety | 3-0-3 |

4. Other Required (2 SHC)

| | | |
|------------------------------------|--------------------------|--------|
| WBL 111 | Work-Based Learning I | 0-10-1 |
| Student Success – Take one course: | | |
| ACA 111 | College Student Success | 1-0-1 |
| ACA 115 | Success & Study Skills | 0-2-1 |
| ACA 122 | College Transfer Success | 1-0-1 |

Total Semester Hours Credit required for graduation: 66

**Building Construction Technology
Credential: Associate in Applied Science
Degree in Building Construction Technology
A35140**

A program that prepares individuals to apply technical knowledge and skills to residential and commercial building construction and remodeling. Includes instruction in construction equipment and safety, site preparation and layout; construction estimating; print reading; building codes; framing, masonry, heating, ventilation, and air conditioning; electrical and mechanical systems; interior and exterior finishing; and plumbing.

Program Length: 5 Semesters
Program Site: Chatham Main Campus

Course requirements for Associate in Applied Science

Degree in Building Construction Technology**1. General Education Requirements (15 SHC)** C-L-SHC

| | | |
|---------|------------------------------------|-------|
| MAT 121 | Algebra/Trigonometry I | 2-2-3 |
| | Humanities/Fine Arts Elective | 3-0-3 |
| | Social/Behavioral Science Elective | 3-0-3 |
| | English; Take one course: | |
| ENG 110 | Freshman Composition | 3-0-3 |
| ENG 111 | Writing & Inquiry | 3-0-3 |
| | Communications; Take one course: | |
| ENG 112 | Writing/Research in the Disc | 3-0-3 |
| ENG 114 | Prof Research & Reporting | 3-0-3 |
| COM 120 | Intro Interpersonal Com | 3-0-3 |

2. Major Requirements (24 SHC)

| | | |
|---------|----------------------------------|-------|
| BPR 130 | Print Reading Construction | 3-0-3 |
| CMT 120 | Codes & Inspections | 3-0-3 |
| CST 241 | Planning & Estimating I | 2-2-3 |
| SST 140 | Green Building & Design Concepts | 3-0-3 |
| CST 111 | Construction I | 3-3-4 |
| CST 112 | Construction II | 3-3-4 |
| CST 221 | Statics/Structures | 3-3-4 |

3. Other Major Requirements (28 SHC)

| | | |
|---------|---------------------------|--------|
| ARC 111 | Intro to Architecture | 1-6-3 |
| CST 113 | Construction III | 3-3-4 |
| CST 131 | OSHA/Safety/Certification | 2-2-3 |
| CST 150 | Building Science | 2-2-3 |
| CST 211 | Construction Surveying | 2-3-3 |
| ELC 113 | Residential Wiring | 2-6-4 |
| MAS 140 | Intro to Masonry | 1-2-2 |
| PLU 111 | Intro to Plumbing | 1-3-2 |
| SST 120 | Energy Use Analysis | 2-2-3 |
| WBL 111 | Work-based Learning I | 0-10-1 |

4. Other Requirements (1 SHC)

Take one course:

| | | |
|---------|--------------------------|-------|
| ACA 111 | College Student Success | 1-0-1 |
| ACA 115 | Success & Study Skills | 0-2-1 |
| ACA 122 | College Transfer Success | 0-2-1 |

Total Semester Hours Credit Required for Graduation: 68

Building Construction Technology
Credential: Building Construction Technology
Diploma
D35140

1. General Education Requirements (6 SHC)

| | | |
|---------|---------------------------|-------|
| MAT 121 | Algebra/Trigonometry I | 2-2-3 |
| | English; Take one Course: | |
| ENG 110 | Freshman Composition | 3-0-3 |
| ENG 111 | Writing & Inquiry | 3-0-3 |

2. Major Requirements (20 SHC)

| | | |
|---------|----------------------------|-------|
| BPR 130 | Print Reading Construction | 3-0-3 |
| CMT 120 | Codes and Inspections | 3-0-3 |
| CST 111 | Construction I | 3-3-4 |
| CST 112 | Construction II | 3-3-4 |

| | | |
|---------|----------------------------------|-------|
| CST 241 | Planning and Estimating I | 2-2-3 |
| SST 140 | Green Building & Design Concepts | 3-0-3 |

3. Other Major Requirements (15 SHC)

| | | |
|---------|---------------------------|-------|
| CST 113 | Construction III | 3-3-4 |
| CST 131 | OSHA/Safety/Certification | 2-2-3 |
| ELC 113 | Residential Wiring | 2-6-4 |
| MAS 140 | Intro to Masonry | 1-2-2 |
| PLU 111 | Intro to Plumbing | 1-3-2 |

Total Semester Hours Credit Required for Graduation: 41

Building Construction Technology
Credential: Building Construction Technology
Certificate
C35140

Course requirements for Building Construction Technology Certificate**1. Major Requirements (8 SHC)** C-L-SHC

| | | |
|---------|-----------------|-------|
| CST 111 | Construction I | 3-3-4 |
| CST 112 | Construction II | 3-3-4 |

2. Other Major Requirements (7 SHC)

| | | |
|---------|---------------------------|-------|
| CST 113 | Construction III | 3-3-4 |
| CST 131 | OSHA/Safety/Certification | 2-2-3 |

Total Semester Hours Required: 15

Engineering Technologies

Computer Engineering Technology
Credential: Associate in Applied Science
Degree in Computer Engineering Technology
A40160

The Computer Engineering Technology curriculum provides the skills required to install, service, and maintain computers, peripherals, networks, and microprocessor and computer controlled equipment. It includes training in both hardware and software, emphasizing operating systems concepts to provide a unified view of computer systems.

Coursework includes mathematics, physics, electronics, digital circuits, and programming with emphasis on the operation, use, and interfacing of memory and devices to the CPU. Additional topics may include communications, networks, operating systems, programming languages, Internet configuration and design, and industrial applications.

Graduates will qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring a knowledge of electronic and computer systems. Graduates will also qualify for certification in electronics, computers, or networks.