SAMPSON COMMUNITY COLLEGE

ELECTRICAL SYSTEMS TECHNOLOGY

OCCUPATIONAL PROGRAMS

The Electrical Systems
Technology curriculum is
designed to train people
interested in installing and
maintaining electrical systems
found in residential,
commercial, and industrial
facilities.

Coursework is an adequate blend of hands-on, online, and face-to-face instruction, including AC/DC theory, wiring methods, programmable logic controllers, industrial motor controls, applications of the National Electric Code, and other subjects such as local needs required.

Graduates should qualify for various jobs in the electrical field as on-the-job trainees or apprentices assisting in the layout, installation, and maintenance of electrical systems.





910.592.8081 | sampsoncc.edu











| | Program Checklist | | | | | | | | | | |
|---|---|--------------------|-----------------|---------------------------------------|---------------------|-------|--|--|--|--|--|
| | Program Title: Electrical Systems Technology | | | | | | | | | | |
| | Effective Date: Fall 2023 | | | | | | | | | | |
| £57 1961 · ~ | Student Name: | Student ID: | | | | | | | | | |
| CoDE Transition | | | | | | | | | | | |
| ENG-002 | Transition English | | | | | | | | | | |
| MAT-003 | Transition Math | | | | | | | | | | |
| Course Prefix | | Course Title | Credit Hours | Degree (A35130) | Diploma (D35130) | Grade | | | | | |
| Fall Semester I | | | | (1.00200) | (200200) | | | | | | |
| ACA-122 | College Transfer Success | | 1 | Х | Х | | | | | | |
| CIS-110 <u>or</u> | Intro to Computers <u>or</u> | | 2.2 | , , , , , , , , , , , , , , , , , , , | | | | | | | |
| DFT-119 | Basic CAD | | 2-3 | Х | | | | | | | |
| ELC-112 | DC/AC Electricity | | 5 | Х | Х | | | | | | |
| ELC-113 | Residential Wiring | | 4 | Х | Х | | | | | | |
| ELC-118 | National Electrical Code | | 2 | Х | Х | | | | | | |
| Communications: | 3 | Х | Х | | | | | | | | |
| | | Total Credit Hours | | 17-18 | 15 | | | | | | |
| Spring Semester | | | | | | | | | | | |
| ELC-114 | Commercial Wiring Motors and Controls | 4 | Х | Х | | | | | | | |
| ELC-117 | 4 | Х | Х | | | | | | | | |
| Program Elective | 3-4 | Х | х | | | | | | | | |
| Natural Sciences/Math: Choose one: MAT 110, MAT 143, or MAT 171 | | | | Х | Х | | | | | | |
| | | Total Credit Hours | | 14-15 | 14-15 | | | | | | |
| Summer Semeste | 100000 | | 100 | 200 | | | | | | | |
| Program Elective | | 3 | Х | Х | | | | | | | |
| ELC-121 | Electrical Estimating | | 2 | X | | | | | | | |
| ELC-128 | Intro to PLC | | 3 | Х | X | | | | | | |
| Program Elective | – Diploma only | 7.15 (2.17) | 2 | | X | | | | | | |
| Fall Semester II | | Total Credit Hours | | 8 | 8 | | | | | | |
| ELC-119 | NEC Calculations | | 2 | X | | | | | | | |
| Program Elective | 33702-3170-7471-3170-4170-4170-4170-4170-4170-4170-4170-4 | | 2 | x | | | | | | | |
| Program Elective | 3 | X | | | | | | | | | |
| ELC-130 | Advanced Motor Controls | 3 | x | | | | | | | | |
| Communications: | 3 | X | | | | | | | | | |
| 22 | | 13 | 0 | | | | | | | | |
| Spring Semester | ĪĪ | Total Credit Hours | | | | | | | | | |
| Program Elective | 3 | Х | | | | | | | | | |
| Program Elective | 3 | X | | | | | | | | | |
| Humanities/Fine | 3 | х | | | | | | | | | |

Program Electives: AHR, ALT, BPR, BUS, CIS, CMT, CSC, CST, CTI, DFT, ELC, HYD, ISC, MEC, MNT, SPA-111, WBL, WLD (Max. 9 credits per prefix, except for

Total Credit Hours

| Course Prefix | Course Title | Credit Hours | Certificate (C35130) (C35130HS) | Industrial Maint. Certificate (C35130IM) (C35130HM)-HS | Renewable Energy Cert. (C35130RE) (35130HE)-HS | Industrial Electrical Certificate (C35130IE) | Electrical Technician Certificate (C35130ET) | Grade |
|---|----------------------------|-----------------|---------------------------------------|---|---|---|---|-------|
| ALT-120 | Renewable Energy Tech. | 3 | | 10 | X | | | |
| ELC-112 | DC/AC Electricity | 5 | Х | Х | Х | Х | Х | |
| ELC-113 | Residential Writing | 4 | X | | | | X | |
| ELC-114 | Commercial Wiring | 4 | X | | | | X | |
| ELC-117 | Motors and Controls | 4 | | X | | X | | |
| ELC-118 | National Electrical Code | 3 | | | | Х | | |
| ELC-220 | Photovoltaic Sys Tech. | 3 | | | X | | | |
| ELC-221 | Adv PV Sys Designs | 3 | | | X | | | |
| HYD-110 | Hydraulics/Pneumatics I | 3 | | X | | | | |
| MNT-110 | Intro to Maint. Procedures | 2 | | Х | | | | |
| WLD-112 | Basic Welding Processes | 2 | | Х | | | | |
| Program Elective: ELC prefix or WBL(max. 2 hrs) | | 3 | | | | | Х | |
| Total Credits: | | | 13 | 16 | 14 | 12 | 16 | |

WBL max. 8 credits).

120, PSY-150, SOC-210, SOC-220, SOC-225

Dates Awarded: Total Credits:



241, ENG-242, HUM-115, MUS-110, MUS-112, PHI-240, REL-110, REL-211, REL-212, REL-221

Social/Behavioral Sciences: Choose one: ECO-251, ECO-252, HIS-111, HIS-112, HIS-121, HIS-131, HIS-132, POL-

Admissions: 910.900.4319 I admissions@sampsoncc.edu Financial Aid: 910.900.4320 I finaid@sampsoncc.edu Learning Resource Center: 910.900.4309

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Sampson Community College I 1801 Sunset Ave, Clinton, NC 28328 I 910.592.8081 I www.sampsoncc.edu

Sampson Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award the associate degree. Sampson Community College also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Sampson Community College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).