

Atlantic Technical College Electricity Program Syllabus 2024-2025



Instructor Name: Mr. Michael Mello & Edmond Reid

Department Name: Architecture & Construction

Office/Classroom Location: Building 12, Room 225A

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Instructor Office Hours: M-Th: 5:30 PM – 6:00 PM

(by appointment only)

Student Hours:	Program Name: Electricity			
Monday – Friday	Career Cluster: Architecture and Construction			
6:00 PM – 9:45 PM	OCP	Course Number/Course Title	Number of	
(Adults)			Hours	
	Α	BCV0603/Electrician Helper	300 hours	
Break: 7:45 PM – 8:00 PM				
	В	BCV0640/Residential	450 hours	
NOTE: All students are expected to be		Electrician		
present during their entire scheduled				
class time(s). All classroom breaks will	С	BCV0652/Commercial	<u>450 hours</u>	
occur on an "as needed" basis. The		Electrician		
instructor's cell phone clock will serve				
as the official time.		Total Hours	1200 total	
			hours	
			(full-time,	
			including	
			summer)	

Technical College Policy/Adult Student Attendance:

Required Book(s) and/or Online Access

- A student must be withdrawn after being absent for six (6) consecutive days.
- Two (2) additional absences may be allowed under certain circumstance with appropriate documentation.

Required Materials/Supplies

• Please refer to the Student Handbook for postsecondary students. http://www.atlantictechcenter.com/Portals/7/pdfs/2015BTC_Handbook_LR.pdf

 Available for purchase at the ATC Bookstore: Electrical Wiring Residential 20th Edition ISBN# 9780357366479 National Electrical Code, 2020 Edition ISBN# 9781455922970 	Purchased from ATC Bookstore: • Safety Glasses • See the columns Below
Classroom Materials	Lab Materials
Required Items	Required (BCV0603) Electrician Helper
1. Student ID (worn at all times while	Close Toe Shoes
on campus)	Safety Glasses
2. 2017 NEC	3. Pencil

- 3. Electrical Resident Workbook 19E
- 4. Pencil(s) w/ eraser
- 5. Pen (Blue or Black Ink)
- 6. 12" ruler
- 7. Calculator
- 8. Highlights (at least two colors)
- Color Pencils or Pens (at least four colors – Black, Red, Blue, Green)
- 10. Notebook or Spiral book with Paper

Optional Items (not required)

- Scientific Calculator W/ Function Key Example is TI-30Xa (would take care of standard calculator)
- 2. Architects Scale Ruler (Would take care of 12" Rulers)
- 3. Tom Henry Key Word Index
- 4. NEC Tabs
- 5. Ugly's Reference Guide

- 4. Tool Pouch or Bag
- 5. 9" Side Cutters
- 6. 4" X 1/4" Straight Screwdriver
- 7. 6" X 3/16" Straight Screwdriver
- 8. 4" Phillips Screwdriver
- 9. Wire Stripper
- 10. Razor Knife
- 11. 1/4" & 5/16" Nut Driver(S)

Suggested Materials/ Supplies (BCV0640) Residential Electrician

- 1. Voltage Tester
- 2. 8" Needle Nose Plier
- 3. Diagonal Cutter (Dikes)
- 4. Grove Joint Plier (Channel Locks)
- 5. 25' Tape Measure
- 6. Torpedo Level, magnetic
- 7. Hacksaw
- 8. Allen Key (folding type) 3/16" 3/8"

• Optional Tools (not required)

- 1. Hammer (min. 18oz.)
- 2. Scratch Awl
- 3. Screw Gun (not impact driver)
- 4. Plug-in Polarity Tester w/ GFCI test function
- 5. Digital Multi Meter (would take care of voltage tester also)
- 6. Fuse Puller

All required books & most materials/supplies can be purchased from the school bookstore. Stop by during operational hours for pricing & purchasing information.

ADULT STUDENTS: All required books & some materials/supplies can be purchased from the school bookstore. Stop by during operational hours for pricing & purchasing information. All other required materials/ retail supplies not available at the bookstore need to be purchased elsewhere. All required books and required materials/retail supplies need to be obtained prior to the start of the program.

Online Course Grading Policy:

Not Applicable

Grading System:	Additional Program Specific G	Additional Program Specific Grading		
A 90 - 100%	Information:	_		
B 80 - 89%	Assignments / Classwork	40%		
C 70 - 79%	Quizzes / Tests	40%		
D 60 - 69%	Work Habits / Employability	20%		
F 0 - 59%				
I Incomplete				

View Your Grades:

Grades can be viewed online by following the directions below:

- 1. Go to https://browardfocus.com (access FOCUS using Chrome, Firefox or Safari)
- 2. Student ID which is on your student schedule.
- 3. Passcode: Student's date of birth formatted as PMM/DD/YYYY.

Two digits for the month, two digits for the day and Four digits for the year.

Class Room/ Lab Rules:

- 1. Must be on time for class and when coming back from lunch.
- 2. All electronic devices must be silent and out of sight during instructional time. This includes cell phones, earbuds, smartwatches, headphones, mp3 players, etc. The school and/or teacher are not responsible for lost or stolen devices/personal belongings of any kind.
- 3. Computer use must be according to Broward County School policy.
- 4. Safety glasses and closed toe shoes are to be worn in the lab/classroom at all times.
- 5. Respect your fellow classmates and Instructor at all times.
- 6. Adhere to all Broward County School Policies.

Industry Certifications & Credential Exam Costs:

- Occupational Safety and Health Administration (OSHA) 10 Hour Construction Safety Outreach Course - \$8
- USB Drive \$6

Outstanding Student Recognition Information:

A gold seal will be applied to a Program Completion Certificate or an Applied Technology Diploma if the student has earned a 3.5 GPA or higher in their Career and Technical Education (CTE) classes.

Program Name: Electricity

Course Number: BCV0603 Course Name: Electrician Helper Occupational Completion Point: A

Intended Outcomes:

- 1.0 Explain the importance of health, safety, environmental stewardship and related regulatory compliance.
- 2.0 Identify, use and maintain the tools and accessories used in the electrical industry.
- 3.0 Demonstrate an understanding of basic Direct-Current (DC) electrical-circuit skills.
- 4.0 Apply mathematics knowledge and skills to electricity.
- 5.0 Demonstrate an understanding of basic electricity.
- 6.0 Read and interpret basic electric codes.
- 7.0 Apply mathematics knowledge and skills to electricity.
- 8.0 Demonstrate further understanding of electricity.
- 9.0 Demonstrate science knowledge and skills related to electrical principles.

Course Number: BCV0640

Course Name: Residential Electrician Occupational Completion Point: B

Intended Outcome:

- 10.0 Demonstrate proficiency in electrical math problems and skills.
- 11.0 Demonstrate Alternating-Current (AC) circuit skills.
- 12.0 Explain the importance of employability and entrepreneurship skills.
- 13.0 Install residential wiring.
- 14.0 Install residential wiring systems.

Course Number: BCV0652

Course Name: Commercial Electrician Occupational Completion Point: C

Intended Outcome:

- 15.0 Demonstrate proficiency in commercial wiring.
- 16.0 Demonstrate specialized electrical skills.

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