

## Heating, Air Conditioning, & Refrigeration Fall 2023 Estimated Student Expense

First Trimester Estimated Expense		
Tuition, Technology Access Fee, and Student Activity Fee		\$1,373.00
Books	ISBN#	Estimated Cost
Modern Refrigeration & Air Conditioning 21ed Bundle (Includes Textbook + Common		
Cartridge)	9781649257321	\$316.00
Electrical Skills for HVACR Bundle (Includes Text + CCK 2yr Access Key)	9781637761588	\$77.00
Soft Skills for the Workplace	9781649250186	\$64.75
Electrical Theory and Application for HVACR	9781930044326	\$46.50
Quick Guide to the Refrigeration Cycle, Refrigerants, and Components	9781930044517	\$17.00
Basic Refrigeration & Charging Procedures	9781930044135	\$37.00
Heat Pumps: Operation, Installation, Service	9781930044296	\$40.00
System Diagnostics and Troubleshooting Procedures	9781930044159	\$37.50
Gas Heating	9781930044531	\$61.00
Low GWP Refrigerant Safety	9781930044678	\$40.00
Ugly's Electrical Reference 2020	9781284194531	\$27.00
Supplies*		<b>Estimated Cost</b>
Safety Glasses, Leather Mechanic Gloves		\$68.59
Test - Purchased through ESCO		Estimated Cost
EPA Section 608 Certification		\$33.00
Low GWP Refrigerant Safety Certification		\$33.00
Employment Ready Air Conditioning Certification		\$20.00
Total Estima	nted First Trimester Cost	\$2,291.34
Second Trimester Estimated Ex	pense	
Tuition, Technology Access Fee, and Student Activity Fee		\$1,373.00
Test - Purchased through ESCO		Estimated Cost
Employment Ready Electrical Certification		\$20.00
Tools - Estimated Cost*		\$1,166.09
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Heat pump gauge manifold w/hoses and low loss fittings, Multi Meter w/ temp probe (Fieldpiece sc440), Pocket flashlight, Valve Core Removal Tool (2), Impact Driver - Impact Driver Bits (1/4, 5/16, 3/8), Nut Drivers (1/4, 5/16, 3/8) – Stubby Nut drivers (1/4, 5/16, 3/8), Screw Drivers (Flat and Phillips) – Thermostat screw driver, Hex Key Set – Torx Key set (for tamper proof screws), Adjustable Wrench (6" and 10"), Ratcheting Wrenches (1/4, 5/16, 3/8), Tekton ½ Drive Socket Set, Refrigeration Service Wrench, Cutting Crimping tool, Groove Joint Plier, 8" Needle Nose Plier, Diagonal Cutter, Wire Strippers, Close Quarter Copper Cutter, Tool Bag (Student discounts at www.Vetopropac.com)

Total Estimated Second Trimester Cost	\$2,559.09	
Third Trimester Estimated Expense		
Tuition, Technology Access Fee, and Student Activity Fee	\$1,373.00	
Test - Purchased through ESCO	<b>Estimated Cost</b>	
Employment Ready System Diagnostics & Troubleshooting Certification	\$20.00	
Employment Ready Gas Heat Certification	\$20.00	
Employment Ready Heat Pump Certification	\$20.00	
Total Estimated Third Trimester Cost	\$1,433.00	

**HVAC Technical Studies Diploma - Total Estimated Program Cost** 

\$6,283.43

<sup>\*</sup>Please note, these tools/supplies on the expense sheet are not available for purchase through TCAT Dickson