

PATHWAY AGREEMENT
PENNSYLVANIA COLLEGE OF TECHNOLOGY

and

REFRIGERATION SERVICE ENGINEERS SOCIETY (RSES)

This agreement establishes a mechanism for working technicians completing **RSES** training courses to earn credit for the below defined coursework at Penn College in the Heating, Ventilation & Air Conditioning Engineering Technology (HEV) program at the appropriate entry point.

RSES Coursework	Hours	Penn College Coursework	Credits
Heat Pump Training Course	128	ACR 111: Introduction to Refrigeration	5
Heating Unit 1: Heating Fundamentals	36	PLH 113: Mechanical Systems Design & Operation	4
Heating Unit 2: Electric Heating	36	ELT 250: HVAC/R Electricity	5
Heating Unit 3: Gas Heating	32	ACR 236: Air Conditioning Systems I	3
Heating Unit 4: Oil Heating	36	ACR 239: Residential HVAC System Design	3
Heating Unit 5: Hot Water Heating	38	ELT 252: HVAC Controls I - Residential	4
Heating Unit 6: Steam Heating	38	PLH 236: Basic Heating Systems (Installation)	3
R/AC Unit 1: Principles of Refrigeration	32	ACR103: HVAC Print Reading & Automated Design	2
R/AC Unit 2: Compressors, Condensers and Cooling Towers	36	ACR 249: Advanced HVAC System Service	3
R/AC Unit 3: Evaporators and System Components	38	ACR 251: Warm-Air Heating & Duct Design	3
R/AC Unit 4: Tools Controls and Troubleshooting	42	ELT 253: HVAC Controls II - Commercial	4
R/AC Unit 5: Air Conditioning Principals	37	PLH 244: Hydronic Heating Systems	4
R/AC Unit 6: Heat Transfer and Distribution	32	ACR 221: Refrigeration Applications - Commercial Installation/Service	4
Electricity Unit 1: Introduction to Electricity	25	ACR 220: Refrigeration Applications – Commercial Systems/Design	4
Electricity Unit 2: Electrical Components	32		
Electricity Unit 3: Basic Electronics	40		
Electricity Unit 4: Troubleshooting Components	44		
Electricity Unit 5: Troubleshooting Residential Equipment	48		
Controls Unit 1: Fundamentals of Controls	30		
Controls Unit 2: Pneumatic Controls	40		

Controls Unit 3: Electromechanical Controls	40		
Controls Unit 4: Basic Electronics for Controls	40		
Controls Unit 5: Electronic Proportional Controls	40		
Total Hours	940	Total Credits	51

This group of courses will satisfy as a block. Major-specific courses are not evaluated individually; students completing all of the listed courses from RSES will receive credit for all of the listed Penn College courses in their respective semesters.

Remaining Coursework at Penn College

First Semester		Second Semester	
Course	Credits	Course	Credits
BHV311 Fundamentals of Engineered Systems Design	3	BHV320 Advanced Cooling System Design	3
BHV316 Heating & Cooling System Configurations	3	BHV325 Advanced Heating Design	3
ENL111 English Composition I	3	ENL201 Technical & Professional Communication	3
PHS103 Physics Survey or SCI100 Environmental Science	3	CSC124 Information, Technology & Society	3
MTH181 College Algebra & Trigonometry I	3	MTH183 College Algebra & Trigonometry II	3
		PHL210 Ethics	3
Total Credits	15	Total Credits	18

Third Semester		Fourth Semester	
Course	Credits	Course	Credits
BHV366 Advanced HVAC Control	3	BHV431 Environmental Impacts of the HVAC Industry	3
BHV400 Commercial Refrigeration Systems Design	3	BHV432 Mechanical System Design	3
ARP Core Arts Perspective	3	BHV495 Senior Project	3
MGT115 Principles of Management	3	CDP Global & Cultural Diversity Elective	3
SCL Science Elective with lab	4	OEE Exploration Elective	3
OEA Open Elective	3	HIP Core Historical Perspective	3
Total Credits	19	Total Credits	18

Summer Session*		<i>*Courses could be completed in the summer session prior to the first semester, between the second and third semesters, or after the fourth semester.</i>
Course	Credits	
SPC Speech Elective	3	
OEA Open Elective	3	
SSP Core Social Science Perspective	3	
Total Credits	9	

Additional Transfer Information

- Individuals must submit a completed Penn College application.
- Students must have gained admission to Penn College and met placement requirements.
- Students must submit an official, final high school transcript.
- Students must submit an official RSES Examination & Training Course Participation Transcript that shows the completion of each course listed above with a final exam score of 75% or higher.
- Students must submit a verification letter from their employer that documents a minimum of two (2) years of full-time experience in the refrigeration industry to establish competency in the occupation. The letter should be submitted to the School of Engineering Technologies, Construction & Architectural Technology division.
- Penn College will only consider those credits earned through **RSES** for the terms of this agreement. Students must request transcripts from additional institutions to be evaluated on an individual basis at Penn College.
- Students must complete a minimum of 36 credits at Penn College for coursework prescribed in the final four semesters of the student's baccalaureate profile.
- Credits will post on the student's official academic transcript upon the successful completion of twelve (12) credits of academic work at Penn College. Prior to completion of twelve (12) credits, for advising and scheduling purposes, approved credits will show on working copies of the student's academic transcript and on the student's graduation profile. Whether Penn College credits will be accepted by another college or university is at the discretion of the receiving college or university.

Agreement formalized June 2022