

TRANSFER ARTICULATION AGREEMENT

BETWEEN

PENNSYLVANIA COLLEGE OF TECHNOLOGY

AND

THADDEUS STEVENS COLLEGE OF TECHNOLOGY

This Articulation Agreement establishes a mechanism for graduates of **Thaddeus Stevens College of Technology**, **Heating**, **Ventilation**, **& Air Conditioning**, **Refrigeration associate degree** to transfer specific earned credits into the **Building Automation Engineering Technology** <u>or</u> **Heating**, **Ventilation & Air Conditioning Engineering Technology bachelor degree** at Penn College.

Thaddeus Stevens College of Technology applicants must have a minimum final cumulative GPA of 2.0 (on a 4.0 scale).

Building Automation Engineering Technology

Penn College's Bachelor's Core	Satisfying Course(s) at Thaddeus Stevens
Communication*: 9 credits	ENG106/3 credits = ENL111
	ENG216/3 credits = ENL201 or ENG221/3 credits = SPC101
Quantitative Thinking**: 6 credits	MATH141 or MATH207/3 credits= MTH181
	*If students complete MATH213 at Thaddeus Stevens, students
	will get credit for MTH181 and MTH183 at Penn College.
Technological Literacy***: 3 credits	CIS111/3 credits
Arts: 3 credits	
Global & Cultural Diversity: 3 credits	
Historical: 3 credits	Humanities Elective/3 credits
Natural Sciences: 7 credits	Science Elective/3 credits
Social Science: 3 credits	
Exploration Electives: 6 credits	MATH137/3 credits
	General Studies Elective/3 credits

^{*}Students completing ENG221 at Thaddeus Stevens will take ENL201 at Penn College. Students completing ENG216 at Thaddeus Stevens will take SPC101 at Penn College.

^{**}A student interested in transferring to the Building Automation Engineering Technology major at Penn College should complete, at a minimum, MATH137 and MATH141. These students would still need to complete MTH183 at Penn College. Students who complete MATH213 prior to enrolling at Penn College would not need to take an additional math course. Students who do not complete MATH141, MATH207 or MATH213, will need to complete both MTH181 and MTH183 at Penn College.

^{***}Students should complete CIS111 at Thaddeus Stevens. Students who do not complete CIS111 will need to complete CSC124 at Penn College.

Penn College Coursework: Building	Thaddeus Stevens – Heating, Ventilation, & Air
Automation Engineering Technology Directed Building Automation Technology Electives (42 credits)	Conditioning, Refrigeration (Credits) Completion of the Heating, Ventilation, & Air Conditioning, Refrigeration associate degree and associated coursework
BBT ELC – Directed Building Automation Technology Electives (Semester 1 – 10 credits)	HEAL Elective (1)
BBT ELC - Directed Building Automation Technology Electives (Semester 2 – 12 credits)	HVAC 123 OSHA Electrical & Construction Safety (1) HVAC 135 Electricity for HVACR (3)
BBT ELC - Directed Building Automation Technology Electives (Semester 3 – 10 credits)	HVAC 138 Lab Practice I: Electrical Applications (2)
BBT ELC - Directed Building Automation Technology	HVAC 143 HVAC Installation Procedures (1)
Electives (Semester 4 – 10 credits)	HVAC 146 Lab Practice II: Installation Procedures (2)
Open Electives (6 credits)	HVAC 150 Principles of Refrigeration (3)
Total - 48 credits	HVAC 155 Residential Heating Systems (3)
	HVAC 160 Lab Practice III: Heating Applications (2)
	HVAC 167 Refrigerant System Components (2)
	HVAC 170 Lab Practice IV: Cooling Applications (2)
	HVAC 175 Refrigerant Management (2)
	HVAC 180 Mechanical Codes for HVACR (1)
	HVAC 206 Air Conditioning Systems (4)
	HVAC 211 Heat Pump Systems (3)
	HVAC 216 Systems Installation and Start Up (3)
	HVAC 221 Commercial Refrigeration (3)
	HVAC 256 Load Calculations (3 credits)
	HVAC 261 Controls of HVAC (3)
	HVAC 266 Ventilation (3)
	HVAC 271 System Servicing and Troubleshooting (3)
	Total - 50 credits

Remaining Coursework at Penn College: Building Automation Engineering Technology

Fifth Semester (Semester 1 at PCT)		Sixth Semester (Semester 2 at PCT)	
Course	Credits	Course	Credits
HVE HVAC Elective (BBT239 –	5	BBT 304 - Direct Digital Control of	4
Fundamentals of Electronics for Building		HVACR Equipment	
Automation Technologies			
BBT209 – Building Automation Industry	3	BBT344 – Electric, Pneumatic &	4
		Electronic Control Systems	
**MTH183 College Algebra &	3	*SPC101 – Fundamentals of Speech	3
Trigonometry II		OR	
OR MTH161 Statistics for STEM Fields	3.5	ENL201 Technical & Professional	
with Computer Applications		Communication	
PHS114 Physics with Technological	4	CDP Core Global & Cultural Diversity	3
Applications		Perspective	
Total Credits	15 or	Total Credits	14
	15.5		

Summer Session

BBT310 – Building Automation Industry Internship = 1 credit

Seventh Semester (Semester 3 at PCT)		Eighth Semester (Semester 4 at PCT)	
Course	Credits	Course	Credits
BBT407 - Building Control Networks I	3	BBT415 - Integrated Building	3
		Operation & Energy Management	
BBT412 – Building Commissioning &	3	BBT417 - Building Control Networks II	4
Recommissioning			
BBT414 – Building Automation	3	BBT496 – Senior Seminar – Lab	2
Programming			
BBT495 – Senior Seminar – Lecture	1	SSP Core Social Science Elective	3
ARP Core Arts Perspective	3		
Total Credits	13	Total Credits	12

Penn College recommends using the Transfer Course Equivalency crosswalk (https://as400sec.pct.edu/CourseCrosswalk/) to choose Electives that will satisfy electives in Penn College's Bachelor Core.

Heating, Ventilation & Air Conditioning Engineering Technology

Penn College's Bachelor's Core	Satisfying Course(s) at Thaddeus Stevens
Communication*: 9 credits	ENG106/3 credits = ENL111
	ENG216/3 credits = ENL201 or ENG221/3 credits = SPC101
	(SPC Elective)
Quantitative Thinking**: 6 credits	MATH141 or MATH207/3 credits= MTH181
	*If students complete MATH213 at Thaddeus Stevens,
	students will get credit for MTH181 and MTH183 at Penn
	College.
Technological Literacy***: 3 credits	CIS111/3 credits
Arts: 3 credits	
Global & Cultural Diversity: 3 credits	
Historical: 3 credits	Humanities Elective/3 credits
Natural Sciences: 7 credits	Science Elective/3 credits (Physics course is recommended).
Social Science: 3 credits	
Exploration Electives: 3 credits	MATH137/3 credits

^{*}Students completing ENG221 at Thaddeus Stevens will take ENL201 at Penn College. Students completing ENG216 at Thaddeus Stevens will take speech elective (SPC) at Penn College.

Penn College recommends using the Transfer Course Equivalency crosswalk (https://as400sec.pct.edu/CourseCrosswalk/) to choose Electives that will satisfy electives in Penn College's Bachelor Core.

^{**}A student interested in transferring to the Heating, Ventilation & Air Conditioning Engineering Technology major at Penn College should complete, at a minimum, MATH137 and MATH141. These students would still need to complete MTH183 at Penn College. Students who complete MATH213 prior to enrolling at Penn College would not need to take an additional math course. Students who do not complete MATH141, MATH207 or MATH213, will need to complete both MTH181 and MTH183 at Penn College.

^{***}Students should complete CIS111 at Thaddeus Stevens. Students who do not complete CIS111 will need to complete CSC124 at Penn College.

Penn College Coursework: Heating, Ventilation & Air Conditioning Engineering Technology	Thaddeus Stevens – Heating, Ventilation, & Air
All HVAC Coursework in the first four semesters	Conditioning, Refrigeration (Credits) Completion of the Heating, Ventilation, & Air
of the Heating, Ventilation & Air Conditioning	Conditioning, Refrigeration associate degree and
Engineering Technology bachelor's degree	associated coursework
	HEAL Elective (1)
Open Electives (5 credits)	General Studies Elective (3)
Total - 53 credits	HVAC 123 OSHA Electrical & Construction Safety (1)
	HVAC 135 Electricity for HVACR (3)
	HVAC 138 Lab Practice I: Electrical Applications (2)
	HVAC 143 HVAC Installation Procedures (1)
	HVAC 146 Lab Practice II: Installation Procedures (2)
	HVAC 150 Principles of Refrigeration (3)
	HVAC 155 Residential Heating Systems (3)
	HVAC 160 Lab Practice III: Heating Applications (2)
	HVAC 167 Refrigerant System Components (2)
	HVAC 170 Lab Practice IV: Cooling Applications (2)
	HVAC 175 Refrigerant Management (2)
	HVAC 180 Mechanical Codes for HVACR (1)
	HVAC 206 Air Conditioning Systems (4)
	HVAC 211 Heat Pump Systems (3)
	HVAC 216 Systems Installation and Start Up (3)
	HVAC 221 Commercial Refrigeration (3)
	HVAC 256 Load Calculations (3 credits)
	HVAC 261 Controls of HVAC (3)
	HVAC 266 Ventilation (3)
	HVAC 271 System Servicing and Troubleshooting (3)
	Total - 53 credits

Remaining Coursework at Penn College: Heating, Ventilation & Air Conditioning Engineering Technology

Fifth Semester (Semester 1 at PCT)		Sixth Semester (Semester 2 at PCT)	
Course	Credits	Course	Credits
BHV311 Fundamentals of Engineered	3	BHV320 Advanced Cooling System	3
Systems Design		Design	
BHV316 Heating & Cooling System	3	BHV325 Advanced Heating Design	3
Configurations			
**MTH183 College Algebra &	3	MGT115 Principles of Management	3
Trigonometry II			
*ENL201 Technical & Professional	3	PHL210 Ethics	3
Communication			
OR			
SPC Elective			
SCL Science Elective with Lab	4	OEA Open Elective	1
Total Credits	16	Total Credits	13

Seventh Semester (Semester 3 at PCT)		Eighth Semester (Semester 4 at PCT)	
Course	Credits	Course	Credits
BHV366 Advanced HVAC Control	3	BHV431 Environmental Impacts of the	3
Systems		HVAC Industry	
BHV400 Commercial Refrigeration	3	BHV432 Mechanical System Design	3
Systems Design			
ARP Core Arts Perspective	3	BHV495 Senior Project	3
SSP Core Social Science Elective	3	CDP Global & Cultural Diversity	3
		Perspective	
Total Credits	12	Total Credits	12

Additional Transfer Information

- Students must have gained admission to Penn College and met placement requirements.
- Students must complete a minimum of 36 credits at Penn College for coursework prescribed in the final four semesters of the curriculum sequence, as set forth in the official College Catalog.
- Students transferring to Penn College are eligible and will be considered for scholarship opportunities the same as currently enrolled students. Students must meet the application deadlines for scholarships for the fall and spring enrollment. Students must be accepted to the College to be eligible.
- Penn College will only consider those credits earned through Thaddeus Stevens College of Technology for the terms of this Articulation Agreement. Students must request transcripts from additional institutions to be evaluated on an individual basis at Penn College.
- Individuals must submit a completed Penn College application.
 - Note: When selecting the Building Automation Engineering Technology major on the Penn College application, students will be prompted to select a secondary major that most closely aligns with their associate's degree. For purposes of this agreement, students should select the Heating, Ventilation & Air Conditioning Technology (HV) major. Once the completed associate degree from Thaddeus Stevens College of Technology has been verified by the Registrar's Office, the secondary major will be removed.
- Individuals must provide an *official* transcript of all college coursework.

Articulation formalized August 2025