 <p>Heating, Ventilating, and Air Conditioning LEVEL 1</p>	Title:	<b>HVAC, Level 1</b>
	Edition:	<b>5</b>
	Publication Date:	<b>2018</b>
	Additional Instructor Requirement(s):	<b>None</b>
	Prerequisite(s):	<b>Core</b>
	Previous Edition Expiration Date:	<b>www.nccer.org/expirations</b>



Book Module Number	Module Name	4 <sup>th</sup> Edition Mod ID #	5 <sup>th</sup> Edition Mod ID #	5 <sup>th</sup> Edition Hours	4 <sup>th</sup> Edition Hours	Equivalent Registry Module(s)	Performance Profile	Comments
---	---	---	---	<b>77.5</b>	72.5	---	---	• Core, 6 <sup>th</sup> edition
1	<b>Introduction to HVAC</b>	03101-13	<b>03101</b>	<b>7.5</b>	7.5	03101-13	No	
2	<b>Trade Mathematics</b>	03102-13	<b>03102</b>	<b>10</b>	10	03102-13	No	
3	<b>Basic Electricity</b>	03106-13	<b>03106</b>	<b>12.5</b>	12.5	03106-13	Yes	
4	<b>Introduction to Heating</b>	03108-13	<b>03108</b>	<b>15</b>	15	03108-13	Yes	
5	<b>Introduction to Cooling</b>	03107-13	<b>03107</b>	<b>30</b>	30	03107-13	Yes	
6	<b>Air Distribution Systems</b>	03109-13	<b>03109</b>	<b>15</b>	15	03109-13	Yes	
7	<b>Basic Copper and Plastic Piping Practices</b>	03103-13	<b>03103</b>	<b>10</b>	10	03103-13	Yes	
8	<b>Soldering and Brazing</b>	03104-13	<b>03104</b>	<b>10</b>	10	03104-13	Yes	
9	<b>Basic Carbon Steel Piping Practices</b>	03105-13	<b>03105</b>	<b>10</b>	10	03105-13	Yes	
				<b>Total Hours</b>	<b>197.5</b>	192.5		

**Definitions:**

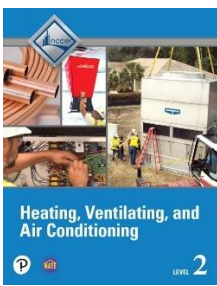
**Lock-Down Module:** A module adopted “as-is” from another craft or an earlier edition of the same curriculum.

**Equivalent Module:** A module whose learning and performance outcomes match those of the newer editions and is therefore considered ‘equivalent’ in NCCER’s Registry.

**Interim Credential:** A module, or group of modules, whose learning and performance outcomes demonstrates competence of specific components in an occupational area and results in a unique credential in the Registry.

**Color Highlight Legend:**

- = No Performance Test
- = Lock-Down Module
- = Equivalent Module
- = Deleted

	Title:	<b>HVAC, Level 2</b>
	Edition:	<b>5</b>
	Publication Date:	<b>2018</b>
	Additional Instructor Requirement(s):	<b>None</b>
	Prerequisite(s):	<b>None</b>
	Previous Edition Expiration Date:	<b>www.nccer.org/expirations</b>



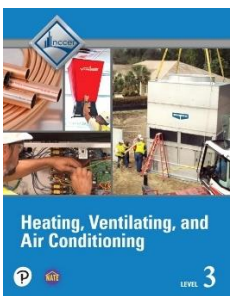
Book Module Number	Module Name	4 <sup>th</sup> Edition Mod ID #	5 <sup>th</sup> Edition Mod ID #	5 <sup>th</sup> Edition Hours	4 <sup>th</sup> Edition Hours	Equivalent Registry Module(s)	Performance Profile	Comments
1	Alternating Current	03206-13	<b>03206</b>	<b>10</b>	10	03206-13	Yes	
2	Compressors	03302-13	<b>03302</b>	<b>12.5</b>	12.5	03302-13	Yes	
3	Refrigerants and Oils	03301-13	<b>03301</b>	<b>15</b>	12.5	03301-13	Yes	• New coverage of HC and HFO refrigerants and R290 (propane)
4	Leak Detection, Evacuation, Recovery and Charging	03205-13	<b>03205</b>	<b>30</b>	30	03205-13	Yes	• Covers EPA Section 608 regulations
5	Metering Devices	03303-13	<b>03303</b>	<b>12.5</b>	12.5	03303-13	Yes	
6	Heat Pumps	03211-13	<b>03211</b>	<b>20</b>	20	03211-13	Yes	
7	Basic Maintenance	03215-13	<b>03215</b>	<b>20</b>	20	03215-13	No	
8	Chimneys, Vents, and Flues	03202-13	<b>03202</b>	<b>5</b>	5	03202-13	No	
9	Sheet Metal Duct Systems	03213-13	<b>03213</b>	<b>10</b>	10	03213-13	No	
10	Fiberglass and Fabric Duct Systems	03214-13	<b>03214</b>	<b>7.5</b>	7.5	03214-13	No	
11	Commercial Airside Systems	03201-13	<b>03201</b>	<b>12.5</b>	12.5	03201-13	No	
12	Air Quality Equipment	03204-13	<b>03204</b>	<b>5</b>	5	03204-13	No	
13	Introduction to Hydronic Systems	03203-13	<b>03203</b>	<b>15</b>	12.5	03203-13	Yes	
				<b>Total Hours</b>	<b>175</b>	170		

**Definitions:**

- Lock-Down Module:** A module adopted “as-is” from another craft or an earlier edition of the same curriculum.
- Equivalent Module:** A module whose learning and performance outcomes match those of the newer editions and is therefore considered ‘equivalent’ in NCCER’s Registry.
- Interim Credential:** A module, or group of modules, whose learning and performance outcomes demonstrates competence of specific components in an occupational area and results in a unique credential in the Registry.

**Color Highlight Legend:**

- = No Performance Test
- = Lock-Down Module
- = Equivalent Module
- = Deleted

 <p>Heating, Ventilating, and Air Conditioning Level 3</p>	Title:	<b>HVAC, Level 3</b>
	Edition:	<b>5</b>
	Publication Date:	<b>2018</b>
	Additional Instructor Requirement(s):	<b>None</b>
	Prerequisite(s):	<b>None</b>
	Previous Edition Expiration Date:	<b>www.nccer.org/expirations</b>



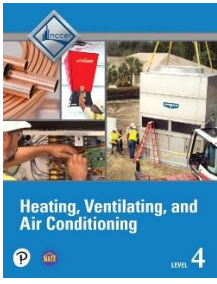
Book Module Number	Module Name	4 <sup>th</sup> Edition Mod ID #	5 <sup>th</sup> Edition Mod ID #	5 <sup>th</sup> Edition Hours	4 <sup>th</sup> Edition Hours	Equivalent Registry Module(s)	Performance Profile	Comments
1	Fasteners, Hardware, and Wiring Terminations	03313-13	<b>03313</b>	<b>10</b>	10	03313-13	Yes	
2	Control Circuit and Motor Troubleshooting	03314-13	<b>03314</b>	<b>30</b>	30	03314-13	Yes	
3	Troubleshooting Cooling	03210-13	<b>03210</b>	<b>20</b>	20	03210-13	Yes	
4	Troubleshooting Heat Pumps	03311-13	<b>03311</b>	<b>12.5</b>	12.5	03311-13	Yes	
5	Troubleshooting Gas Heating	03209-13	<b>03209</b>	<b>12.5</b>	12.5	03209-13	Yes	
6	Troubleshooting Oil Heating	03310-13	<b>03310</b>	<b>15</b>	10	03310-13	Yes	
7	Troubleshooting Accessories	03312-13	<b>03312</b>	<b>10</b>	10	03312-13	Yes	
8	Zoning, Ductless, and Variable Refrigerant Flow Systems	03315-13	<b>03315</b>	<b>15</b>	12.5	03315-13	Yes	
9	Commercial Hydronic Systems	03305-13	<b>03305</b>	<b>12.5</b>	10	03305-13	Yes	
10	Steam Systems	03306-13	<b>03306</b>	<b>10</b>	10	03306-13	Yes	
11	Retail Refrigeration Systems	03304-13	<b>03304</b>	<b>15</b>	15	03304-13	Yes	
12	Customer Relations	03316-13	<b>03316</b>	<b>5</b>	5	03316-13	Yes	
				<b>Total Hours</b>	<b>167.5</b>	157.5		

**Definitions:**

- Lock-Down Module:** A module adopted “as-is” from another craft or an earlier edition of the same curriculum.
- Equivalent Module:** A module whose learning and performance outcomes match those of the newer editions and is therefore considered ‘equivalent’ in NCCER’s Registry.
- Interim Credential:** A module, or group of modules, whose learning and performance outcomes demonstrates competence of specific components in an occupational area and results in a unique credential in the Registry.

**Color Highlight Legend:**

- = No Performance Test
- = Lock-Down Module
- = Equivalent Module
- = Deleted

	Title:	<b>HVAC, Level 4</b>
	Edition:	<b>5</b>
	Publication Date:	<b>2018</b>
	Additional Instructor Requirement(s):	<b>None</b>
	Prerequisite(s):	<b>None</b>
	Previous Edition Expiration Date:	<b>www.nccer.org/expirations</b>



Book Module Number	Module Name	4 <sup>th</sup> Edition Mod ID #	5 <sup>th</sup> Edition Mod ID #	5 <sup>th</sup> Edition Hours	4 <sup>th</sup> Edition Hours	Equivalent Registry Module(s)	Performance Profile	Comments
1	Water Treatment	03308-13	<b>03308</b>	<b>10</b>	10	03308-13	Yes	
2	Indoor Air Quality	03403-13	<b>03403</b>	<b>12.5</b>	12.5	03403-13	Yes	
3	Energy Conservation Equipment	03404-13	<b>03404</b>	<b>7.5</b>	7.5	03404-13	No	
4	Building Management Systems	03405-13	<b>03405</b>	<b>12.5</b>	12.5	03405-13	Yes	
5	System Air Balancing	03402-13	<b>03402</b>	<b>15</b>	15	03402-13	Yes	
6	System Startup and Shutdown	03406-13	<b>03406</b>	<b>15</b>	15	03406-13	Yes	
7	Construction Drawings and Specifications	03401-13	<b>03401</b>	<b>12.5</b>	12.5	03401-13	Yes	
8	Heating and Cooling System Design	03407-13	<b>03407</b>	<b>22.5</b>	22.5	03407-13	Yes	
9	Commercial/Industrial Refrigeration Systems	03408-13	<b>03408</b>	<b>20</b>	20	03408-13	Yes	
10	Alternative and Specialized Heating and Cooling Systems	03409-13	<b>03409</b>	<b>7.5</b>	7.5	03409-13	No	
11	Fundamentals of Crew Leadership	46101-11	<b>46101</b>	<b>22.5</b>	20	46101-11 46101-17	Yes	
				<b>Total Hours</b>	<b>157.5</b>	155		

**Definitions:**

- Lock-Down Module:** A module adopted “as-is” from another craft or an earlier edition of the same curriculum.
- Equivalent Module:** A module whose learning and performance outcomes match those of the newer editions and is therefore considered ‘equivalent’ in NCCER’s Registry.
- Interim Credential:** A module, or group of modules, whose learning and performance outcomes demonstrates competence of specific components in an occupational area and results in a unique credential in the Registry.

**Color Highlight Legend:**

- = No Performance Test
- = Lock-Down Module
- = Equivalent Module
- = Deleted