

Architectural Design & Construction - COE

CONSTRUCTION MANAGEMENT TECHNOLOGY

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Workforce Degrees and Certificates

Construction Management Technology

CONSTRUCTION MANAGEMENT TECHNOLOGY - GENERAL

Associate of Applied Science

FIRST YEAR

First Semester - Fall

			SCH
EDUC	1300	Learning Framework	3
ELPT	1315	Electrical Calculations I	3
CNBT	1301	Introduction to the Construction Industry	3
CNBT	1318	Construction Tools & Techniques	3
CNBT	1300	Residential & Light Commercial Blueprint Reading	3
CNBT	1311	Construction Methods & Materials I	3
Semester Total			18

Second Semester - Spring

CNBT	1342	Building Codes & Inspections	3
ELPT	1329	Residential Wiring	3
CNBT	1346	Construction Estimating I	3
CNBT	1302	Mechanical, Plumbing, & Electrical Systems in Construction I	3
CNBT	1316	Construction Technology I	3
Semester Total			15

SECOND YEAR

First Semester - Fall

			SCH
XXXX	#3## ¹	General Education Elective	3
CNBT	2337	Construction Estimating II	3
XXXX	#3## ¹	Humanities/Fine Arts Elective	3
Semester Total			9

Second Semester - Spring

CNBT	2342	Construction Management I	3
XXXX	#3## ¹	Math/Natural Science Elective	3
XXXX	#3## ¹	General Education Elective	3
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
Semester Total			12

Third Semester - Summer

CNBT	1391	Special Topics in Construction/Building Technology/Technician	3
CNBT	2335	Computer-Aided Construction Scheduling (Capstone)	3
Semester Total			6

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

Workforce Degrees and Certificates

CONSTRUCTION MANAGEMENT TECHNOLOGY - CRAFT MANAGEMENT SPECIALIZATION

Associate of Applied Science

FIRST YEAR SCH

Block credit for approved certification: 21 semester hours. 21

EDUC	1300	Learning Framework	3
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Semester Total **24**

SECOND YEAR

First Semester - Fall SCH

XXXX	#3## ¹	General Education Elective	3
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CNBT	1342	Building Codes & Inspections	3
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CNBT	2335	Computer-Aided Construction Scheduling	3
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CNBT	1300	Residential & Light Commercial Blueprint Reading	3
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XXXX	#3## ¹	Humanities/Fine Arts Elective	3
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Semester Total **15**

Second Semester - Spring

CNBT	1346	Construction Estimating I	3
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CNBT	2342	Construction Management I	3
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XXXX	#3## ¹	Math/Natural Science Elective	3
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XXXX	#3## ¹	General Education Elective	3
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XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
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Semester Total **15**

Third Semester - Summer

CNBT	2337	Construction Estimating II	3
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CNBT	1391	Special Topics in Construction/Building Technology/Technician (Capstone)	3
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Semester Total **6**

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

Workforce Degrees and Certificates

CONSTRUCTION MANAGEMENT TECHNOLOGY

Certificate - Level 1

First Semester - Fall			SCH
ELPT	1315	Electrical Calculations I	3
CNBT	1301	Introduction to the Construction Industry	3
CNBT	1318	Construction Tools & Techniques	3
CNBT	1300	Residential & Light Commercial Blueprint Reading	3
CNBT	1311	Construction Methods & Materials I	3
Semester Total			15
Second Semester - Spring			
CNBT	2335	Computer-Aided Construction Scheduling	3
ELPT	1329	Residential Wiring	3
CNBT	1302	Mechanical, Plumbing, & Electrical Systems in Construction I	3
CNBT	1316	Construction Technology I (Capstone)	3
Semester Total			12
Total Minimum Credits for the Level 1 Certificate			27

Workforce Degrees and Certificates

CONSTRUCTION MANAGEMENT TECHNOLOGY - CONSTRUCTION HELPER

Certificate - Level 1

First Semester - Fall			SCH
ELPT	1315	Electrical Calculations I	3
CNBT	1301	Introduction to the Construction Industry	3
CNBT	1318	Construction Tools & Techniques	3
CNBT	1300	Residential & Light Commercial Blueprint Reading	3
CNBT	1311	Construction Methods & Materials I (Capstone)	3
Semester Total			15
Total Minimum Credits for the Level 1 Certificate			15

Workforce Degrees and Certificates

Drafting & Design Engineering Technology

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - GENERAL

Associate of Applied Science

FIRST YEAR

First Semester - Fall			SCH
EDUC	1300	Learning Framework	3
ENGL	1301	Composition I	3
DFTG	1305	Technical Drafting	3
DFTG	1309	Basic Computer-Aided Drafting	3
MATH	1314	College Algebra	3
Semester Total			15

Second Semester - Spring

DFTG	2319	Intermediate Computer-Aided Drafting	3
DFTG	2317	Descriptive Geometry	3
ENGL	1302	Composition II OR	
ENGL	2311	Technical & Business Writing	3
DFTG	1333	Mechanical Drafting	3
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
Semester Total			15

SECOND YEAR

First Semester - Fall			SCH
DFTG	1358	Electrical/Electronics Drafting OR	
DFTG	1329	Electro-Mechanical Drafting	3
DFTG	1310	Specialized Basic Computer Aided Drafting (CAD)	3
DFTG	2323	Pipe Drafting	3
DFTG	2330	Civil Drafting	3
MATH	1316	Plane Trigonometry	3
Semester Total			15

Second Semester - Spring

DFTG	1317	Architectural Drafting-Residential	3
ARCE	1352	Structural Drafting	3
DFTG	2335	Advanced Technologies in Mechanical Design & Drafting	
DFTG	2340	OR Solid Modeling/Design	3
XXXX	#3## ¹	Humanities/Fine Arts Elective	3
DFTG	2338	Final Project - Advanced Drafting (Capstone)	3
Semester Total			15

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - GENERAL

Certificate - Level 1

First Semester - Fall			SCH
DFTG	1309	Basic Computer-Aided Drafting	3
DFTG	1305	Technical Drafting	3
Semester Total			6
Second Semester - Spring			
DFTG	1358	Electrical/Electronics Drafting OR	
DFTG	1329	Electro-Mechanical Drafting	3
DFTG	2319	Intermediate Computer-Aided Drafting OR	
DFTG	1310	Specialized Basic Computer Aided Drafting (CAD)	3
DFTG	1333	Mechanical Drafting	3
DFTG	1317	Architectural Drafting-Residential	3
Semester Total			12
Third Semester - Summer			
DFTG	2323	Pipe Drafting	3
DFTG	2330	Civil Drafting (Capstone)	3
ARCE	1352	Structural Drafting	3
Semester Total			9
Total Minimum Credits for the Level 1 Certificate			27

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - ARCHITECTURAL SPECIALIZATION

Associate of Applied Science

FIRST YEAR

First Semester - Fall SCH

EDUC	1300	Learning Framework	3
ENGL	1301	Composition I	3
DFTG	1305	Technical Drafting	3
DFTG	1309	Basic Computer-Aided Drafting	3
MATH	1314	College Algebra	3
Semester Total			15

Second Semester - Spring

DFTG	2319	Intermediate Computer-Aided Drafting	3
DFTG	1317	Architectural Drafting-Residential	3
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
MATH	1316	Plane Trigonometry	3
ARCE	1352	Structural Drafting	3
Semester Total			15

SECOND YEAR

First Semester - Fall SCH

XXXX	#3## ¹	Humanities/Fine Arts Elective	3
DFTG	2300	Intermediate Architectural Drafting-Residential	3
ENGL	1302	Composition II OR	
ENGL	2311	Technical & Business Writing	3
DFTG	2330	Civil Drafting	3
DFTG	1376	Revit Residential	3
Semester Total			15

Workforce Degrees and Certificates

Second Semester - Spring

DFTG	2331	Advanced Technologies in Architectural Design & Drafting	3
DFTG	1392	Special Topics in Architectural Drafting & Architectural CAD/CADD	3
DFTG	2328	Architectural Drafting - Commercial (Capstone)	3
ARCE	2352	Mechanical & Electrical Systems OR	
XXXX	#3## ²	Program Approved Elective	3
DFTG	2338	Final Project - Advanced Drafting OR	
DFTG	2381	Cooperative Education - Drafting & Design Technology/Technician, General	3

Semester Total **15**

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

² ARCE 2352, DFTG 1302, 1305, 1309, 1310, 1313, 1315, 1317, 1329, 1333, 1345, 1358, 1372, 1376, 1391, 1391 - Auto-ISO, 1392 - Architectural Desktop I, 1392 - Green Building, 1392 - Revit Residential, 1393, 1394, 1395, 2300, 2302, 2304, 2305, 2306, 2307, 2308, 2310, 2317, 2319, 2321, 2323, 2328, 2330, 2331, 2332, 2335, 2336, 2338, 2340, 2345, 2358, 2370, 2371, 2373, 2374, 2380, 2381.

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - ARCHITECTURAL SPECIALIZATION

Certificate - Level 1

First Semester - Fall

			SCH
DFTG	1309	Basic Computer-Aided Drafting	3
DFTG	1305	Technical Drafting	3
Semester Total			6

Second Semester - Spring

ARCE	1352	Structural Drafting	3
DFTG	1317	Architectural Drafting-Residential	3
DFTG	2319	Intermediate Computer-Aided Drafting	3
DFTG	2330	Civil Drafting	3
Semester Total			12

Third Semester - Summer

DFTG	1376	Revit Residential	3
ARCE	2352	Mechanical & Electrical Systems OR	
XXXX	#3## ¹	Program Approved Elective	3
DFTG	2328	Architectural Drafting - Commercial (Capstone)	3
Semester Total			9

Total Minimum Credits for the Level 1 Certificate **27**

¹ ARCE 2352, DFTG 1302, 1305, 1309, 1310, 1313, 1315, 1317, 1329, 1333, 1345, 1358, 1372, 1376, 1391, 1391 - Auto-ISO, 1392 - Architectural Desktop I, 1392 - Green Building, 1392 - Revit Residential, 1393, 1394, 1395, 2300, 2302, 2304, 2305, 2306, 2307, 2308, 2310, 2317, 2319, 2321, 2323, 2328, 2330, 2331, 2332, 2335, 2336, 2338, 2340, 2345, 2358, 2370, 2371, 2373, 2374, 2380, 2381.

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - CIVIL SPECIALIZATION

Associate of Applied Science

FIRST YEAR

First Semester - Fall			SCH
EDUC	1300	Learning Framework	3
ENGL	1301	Composition I	3
DFTG	1305	Technical Drafting	3
DFTG	1309	Basic Computer-Aided Drafting	3
MATH	1314	College Algebra	3
Semester Total			15

Second Semester - Spring

DFTG	2319	Intermediate Computer-Aided Drafting	3
SRVY	1301	Introduction to Surveying	3
DFTG	1310	Specialized Basic Computer Aided Drafting (CAD) OR	
DFTG	#3## ¹	Drafting Elective	3
DFTG	2317	Descriptive Geometry	3
MATH	1316	Plane Trigonometry	3
Semester Total			15

SECOND YEAR

First Semester - Fall			SCH
XXXX	#3## ²	Social/Behavioral Sciences Elective	3
SRVY	1341	Land Surveying	3
DFTG	2321	Topographical Drafting OR	
DFTG	2375	Introduction to GIS	3
ENGL	1302	Composition II OR	
ENGL	2311	Technical & Business Writing	3
DFTG	2330	Civil Drafting	3
Semester Total			15

Workforce Degrees and Certificates

Second Semester - Spring

ARCE	1352	Structural Drafting	3
DFTG	2370	Intermediate CAD (Microstation)	3
XXXX	#3## ²	Humanities/Fine Arts Elective	3
SRVY	2348	Plane Surveying	3
DFTG	2374	Civil 3D OR	
DFTG	2338	Final Project - Advanced Drafting (Capstone)	3
Semester Total			15
Total Minimum Credits for the AAS Degree			60

¹ ARCE 2352, DFTG 1302, 1305, 1309, 1310, 1313, 1315, 1317, 1329, 1333, 1345, 1358, 1372, 1376, 1391, 1391 - Auto-ISO, 1392 - Architectural Desktop I, 1392 - Green Building, 1392 - Revit Residential, 1393, 1394, 1395, 2300, 2302, 2304, 2305, 2306, 2307, 2308, 2310, 2317, 2319, 2321, 2323, 2328, 2330, 2331, 2332, 2335, 2336, 2338, 2340, 2345, 2358, 2370, 2371, 2373, 2374, 2380, 2381.

² A list of electives appears in the Core Curriculum section of this catalog.

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - CIVIL SPECIALIZATION

Certificate - Level 1

First Semester - Fall

			SCH
DFTG	1309	Basic Computer-Aided Drafting	3
DFTG	1305	Technical Drafting	3
Semester Total			6

Second Semester - Spring

DFTG	1310	Specialized Basic Computer Aided Drafting (CAD)	3
DFTG	2319	Intermediate Computer-Aided Drafting	3
SRVY	1301	Introduction to Surveying	3
DFTG	2330	Civil Drafting	3
Semester Total			12

Third Semester - Summer

SRVY	1341	Land Surveying	3
DFTG	2374	Civil 3-D OR	
DFTG	2338	Final Project - Advanced Drafting (Capstone)	3
ARCE	1352	Structural Drafting	3
Semester Total			9

Total Minimum Credits for the Level 1 Certificate **27**

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - ELECTRICAL SPECIALIZATION

Associate of Applied Science

FIRST YEAR

First Semester - Fall			SCH
EDUC	1300	Learning Framework	3
ENGL	1301	Composition I	3
DFTG	1305	Technical Drafting	3
DFTG	1309	Basic Computer-Aided Drafting	3
MATH	1314	College Algebra	3
Semester Total			15

Second Semester - Spring

DFTG	1333	Mechanical Drafting	3
DFTG	2319	Intermediate Computer-Aided Drafting	3
XXXX	#3## ¹	Humanities/Fine Arts Elective	3
DFTG	1329	Electro-Mechanical Drafting	3
MATH	1316	Plane Trigonometry	3
Semester Total			15

SECOND YEAR

First Semester - Fall			SCH
DFTG	1310	Specialized Basic Computer Aided Drafting (CAD)	3
DFTG	2317	Descriptive Geometry	3
DFTG	1358	Electrical/Electronics Drafting	3
DFTG	2340	Solid Modeling/Design	3
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
Semester Total			15

Second Semester - Spring

DFTG	2335	Advanced Technologies in Mechanical Design & Drafting	3
DFTG	2302	Machine Drafting	3
DFTG	2305	Printed Circuit Board Design OR	
XXXX	#3## ²	Program Approved Elective	3
ENGL	1302	Composition II OR	
ENGL	2311	Technical & Business Writing	3
DFTG	2307	Electrical Drafting (Capstone)	3
Semester Total			15

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

² Consult with an advisor to select an appropriate elective.

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - ELECTRICAL SPECIALIZATION

Certificate - Level 1

First Semester - Fall			SCH
DFTG	1309	Basic Computer-Aided Drafting	3
DFTG	1305	Technical Drafting	3
Semester Total			6
Second Semester - Spring			
DFTG	1310	Specialized Basic Computer Aided Drafting (CAD)	3
DFTG	2319	Intermediate Computer-Aided Drafting	3
DFTG	1333	Mechanical Drafting	3
DFTG	1358	Electrical/Electronics Drafting	3
Semester Total			12
Third Semester - Summer			
DFTG	2302	Machine Drafting	3
DFTG	2335	Advanced Technologies in Mechanical Design & Drafting OR	
DFTG	2340	Solid Modeling/Design	3
DFTG	1329	Electro-Mechanical Drafting	3
Semester Total			9
Total Minimum Credits for the Level 1 Certificate			27

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - MECHANICAL SPECIALIZATION

Associate of Applied Science

FIRST YEAR

First Semester - Fall			SCH
EDUC	1300	Learning Framework	3
ENGL	1301	Composition I	3
DFTG	1305	Technical Drafting	3
DFTG	1309	Basic Computer-Aided Drafting	3
MATH	1314	College Algebra	3
Semester Total			15

Second Semester - Spring

DFTG	1333	Mechanical Drafting	3
DFTG	2319	Intermediate Computer-Aided Drafting	3
XXXX	#3## ¹	Humanities/Fine Arts Elective	3
DFTG	2340	Solid Modeling/Design	3
MATH	1316	Plane Trigonometry	3
Semester Total			15

SECOND YEAR

First Semester - Fall			SCH
DFTG	2335	Advanced Technologies in Mechanical Design & Drafting	3
DFTG	2317	Descriptive Geometry	3
DFTG	2306	Machine Design	3
DFTG	2302	Machine Drafting	3
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
Semester Total			15

Second Semester - Spring

DFTG	1310	Specialized Basic Computer Aided Drafting (CAD)	3
DFTG	2338	Final Project - Advanced Drafting OR	
DFTG	2381	Cooperative Education - Drafting & Design Technology/Technician, General	3
DFTG	2358	Advanced Machine Design (Capstone)	3
ENGL	1302	Composition II OR	
ENGL	2311	Technical & Business Writing	3
XXXX	#3## ²	Program Approved Elective	3
Semester Total			15

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

² Consult with an advisor to select an appropriate elective.

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - MECHANICAL SPECIALIZATION

Certificate - Level 1

First Semester - Fall

			SCH
DFTG	1309	Basic Computer-Aided Drafting	3
DFTG	1305	Technical Drafting	3
Semester Total			6

Second Semester - Spring

DFTG	1333	Mechanical Drafting	3
DFTG	2319	Intermediate Computer-Aided Drafting	3
DFTG	2317	Descriptive Geometry	3
DFTG	2340	Solid Modeling/Design	3
Semester Total			12

Third Semester - Summer

DFTG	2306	Machine Design (Capstone)	3
DFTG	2302	Machine Drafting	3
DFTG	2335	Advanced Technologies in Mechanical Design & Drafting	3
Semester Total			9

Total Minimum Credits for the Level 1 Certificate **27**

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - PIPE SPECIALIZATION

Associate of Applied Science

FIRST YEAR

First Semester - Fall			SCH
EDUC	1300	Learning Framework	3
ENGL	1301	Composition I	3
DFTG	1305	Technical Drafting	3
DFTG	1309	Basic Computer-Aided Drafting	3
MATH	1314	College Algebra	3
Semester Total			15

Second Semester - Spring

DFTG	2319	Intermediate Computer-Aided Drafting	3
XXXX	#3## ¹	Humanities/Fine Arts Elective	3
DFTG	2323	Pipe Drafting	3
DFTG	1333	Mechanical Drafting	3
DFTG	2317	Descriptive Geometry	3
Semester Total			15

SECOND YEAR

First Semester - Fall			SCH
DFTG	1395	Special Topics in Mechanical Drafting & Mechanical Drafting CAD/CADD	3
DFTG	2308	Instrumentation Drafting	3
XXXX	#3## ²	Program Approved Elective	3
MATH	1316	Plane Trigonometry	3
XXXX	#3## ¹	Social/Behavioral Sciences Elective	3
Semester Total			15

Second Semester - Spring

ENGL	1302	Composition II OR	
ENGL	2311	Technical & Business Writing	3
DFTG	2340	Solid Modeling/Design	3
DFTG	2345	Advanced Pipe Drafting (Capstone)	3
DFTG	1372	Smart Plant 3D Drafting OR	
DFTG	2373	Piping Design Management Systems (PDMS)	3
ARCE	1352	Structural Drafting	3
Semester Total			15

Total Minimum Credits for the AAS Degree **60**

¹ A list of electives appears in the Core Curriculum section of this catalog.

² Consult with an advisor to select an appropriate elective.

Workforce Degrees and Certificates

DRAFTING & DESIGN ENGINEERING TECHNOLOGY - COMPUTER-AIDED DRAFTING - PIPE SPECIALIZATION

Certificate - Level 1

First Semester - Fall			SCH
DFTG	1309	Basic Computer-Aided Drafting	3
DFTG	1305	Technical Drafting	3
Semester Total			6
Second Semester - Spring			
DFTG	2319	Intermediate Computer-Aided Drafting	3
DFTG	2323	Pipe Drafting	3
DFTG	1333	Mechanical Drafting	3
DFTG	2308	Instrumentation Drafting	3
Semester Total			12
Third Semester - Summer			
ARCE	1352	Structural Drafting	3
DFTG	1395	Special Topics in Mechanical Drafting & Mechanical Drafting CAD/CADD AutoPlant Isometrics OR	
DFTG	1372	Smart Plant 3D Drafting	3
DFTG	2345	Advanced Pipe Drafting (Capstone)	3
Semester Total			9
Total Minimum Credits for the Level 1 Certificate			27

Workforce Degrees and Certificates

Heating, Air Conditioning, & Refrigeration

HEATING, AIR CONDITIONING & REFRIGERATION

Associate of Applied Science

FIRST YEAR

First Semester - Fall			SCH
EDUC	1300	Learning Framework	3
ELPT	1315	Electrical Calculations I	3
HART	1301	Basic Electricity for HVAC	3
HAR	1356 ¹	EPA Recovery Certification Preparation	3
XXXX	#3## ²	Social/Behavioral Sciences Elective	3
Semester Total			15

Second Semester - Spring

HART	1303	Air Conditioning Control Principles	3
HART	1307	Refrigeration Principles	3
HART	1341 ³	Residential Air Conditioning	3
HART	1345 ³	Gas & Electric Heating	3
XXXX	#3## ²	Social/Behavioral Sciences Elective	3
Semester Total			15

Third Semester - Summer

HART	2334 ³	Advanced Air Conditioning Controls	3
HART	2341	Commercial Air Conditioning	3
HART	2345	Residential Air Conditioning Systems Design OR	
HART	2302	Commercial Air Conditioning System Design	3
XXXX	#3## ²	Humanities/Fine Arts Elective	3
XXXX	#3## ²	Math/Natural Science Elective	3
Semester Total			15

SECOND YEAR

First Semester - Fall			SCH
HART	2336	Air Conditioning Troubleshooting (Capstone)	3
HART	2342 ¹	Commercial Refrigeration	3
HART	2349 ¹	Heat Pumps	3
HART	2374	Building Control Systems	3
XXXX	#3## ²	Humanities/Fine Arts Elective	3
Semester Total			15
Total Minimum Credits for the AAS Degree			60

¹ Employment Ready (ER) certification required.

² A list of electives appears in the Core Curriculum section of this catalog.

³ EPA certification required.

Workforce Degrees and Certificates

HEATING, AIR CONDITIONING & REFRIGERATION - BASIC

Certificate - Level 1

First Semester - Fall			SCH
ELPT	1315	Electrical Calculations I	3
HART	1301	Basic Electricity for HVAC	3
HART	1356	EPA Recovery Certification Preparation	3
Semester Total			9
Second Semester - Spring			
HART	1303	Air Conditioning Control Principles	3
HART	1307	Refrigeration Principles	3
HART	1341	Residential Air Conditioning (Capstone)	3
HART	1345	Gas & Electric Heating	3
Semester Total			12
Total Minimum Credits for the Level 1 Certificate			21

Workforce Degrees and Certificates

HEATING, AIR CONDITIONING & REFRIGERATION - ADVANCED

Certificate - Level 1

First Semester - Fall

			SCH
ELPT	1315	Electrical Calculations I	3
HART	1301	Basic Electricity for HVAC	3
HART	1307	Refrigeration Principles	3
HART	1356	EPA Recovery Certification Preparation	3
Semester Total			12

Second Semester - Spring

HART	1303	Air Conditioning Control Principles	3
HART	1341	Residential Air Conditioning	3
HART	1345	Gas & Electric Heating	3
HART	2342	Commercial Refrigeration	3
HART	2334	Advanced Air Conditioning Controls	3
Semester Total			15

Third Semester - Summer

HART	2336	Air Conditioning Troubleshooting (Capstone)	3
HART	2341	Commercial Air Conditioning	3
HART	2349	Heat Pumps	3
HART	2302	Commercial Air Conditioning System Design	3
HART	2345	Residential Air Conditioning Systems Design	3
Semester Total			15

Total Minimum Credits for the Level 1 Certificate **42**

Workforce Degrees and Certificates

Industrial Electricity

INDUSTRIAL ELECTRICITY - ELECTRICAL TECHNOLOGY

Associate of Applied Science

FIRST YEAR

First Semester - Fall			SCH
EDUC	1300	Learning Framework	3
ELPT	1321	Introduction to Electrical Safety and Tools	3
ELPT	1315	Electrical Calculations I	3
ELPT	1325	National Electrical Code I	3
CNBT	1300	Residential and Light Commercial Blueprint Reading	3
Semester Total			15

Second Semester - Spring

xxxx	#3## ¹	Humanities/Fine Arts Elective	3
ELPT	1311	Basic Electrical Theory	3
ELPT	1329	Residential Wiring	3
ELPT	1345	Commercial Wiring	3
ECON	1301	Introduction to Economics OR	
XXXX	#3##	Department Approved General Education Elective	3
Semester Total			15

SECOND YEAR

First Semester - Fall			SCH
ELPT	1355	Electronic Applications	3
ELPT	1341	Motor Control	3
ELPT	1357	Industrial Wiring	3
ELPT	2380	Cooperative Education - Electrical and Power Transmission Installation/Installer, General OR	
ELPT	2337	Electrical Planning and Estimating	3
MATH	1332	Contemporary Mathematics	3
Semester Total			15

Workforce Degrees and Certificates

Second Semester - Spring

ELMT	1301	Programmable Logic Controllers	3
ELPT	2343	Electrical Systems Design (Capstone)	3
ELPT	2305	Motors and Transformers	3
XXXX	#3## ¹	Social/Behavioral Science Elective	3
ELPT	2347	Electrical Testing and Maintenance OR	
ELPT	2381	Cooperative Education - Electrical and Power Transmission Installation/Installer, General	3
Semester Total			15
Total Minimum Credits for the AAS			60

¹ A list of electives appears in the Core Curriculum section of this catalog.

Workforce Degrees and Certificates

Industrial Electricity

INDUSTRIAL ELECTRICITY - ELECTRICAL HELPER

Certificate - Level 1

First Semester - Fall			SCH
ELPT	1315	Electrical Calculations I	3
ELPT	1221	Introduction to Electrical Safety & Tools	3
ELPT	1311	Basic Electrical Theory	3
ELPT	1325	National Electrical Code I	3
ELPT	1329	Residential Wiring	3
ELPT	1345	Commercial Wiring (Capstone)	3
Semester Total			17
Total Minimum Credits for the Level 1 Certificate			17

Workforce Degrees and Certificates

INDUSTRIAL ELECTRICITY - ELECTRICAL POWER TECHNOLOGY

Certificate - Level 1

First Semester - Fall

			SCH
ELPT	1315	Electrical Calculations I	3
ELPT	1221	Introduction to Electrical Safety & Tools	2
ELPT	1325	National Electrical Code I	3
CNBT	1300	Residential & Light Commercial Blueprint Reading	3
ELPT	1329	Residential Wiring	3
Semester Total			14

Second Semester - Spring

ELPT	1341	Motor Control	3
ELPT	1311	Basic Electrical Theory	3
ELMT	1301	Programmable Logic Controllers	3
ELPT	1345	Commercial Wiring	3
ELPT	1457	Industrial Wiring	4
Semester Total			16

Third Semester - Summer

ELPT	1355	Electronic Applications	3
ELPT	2337	Electrical Planning & Estimating	3
Semester Total			6

Total Minimum Credits for the Level 1 Certificate **36**

Workforce Degrees and Certificates

INDUSTRIAL ELECTRICITY - INDUSTRIAL AUTOMATION TECHNOLOGY

Certificate - Level 1

			SCH
First Semester - Fall			
ELPT	1315	Electrical Calculations I	3
ELPT	1321	Introduction to Electrical Safety & Tools	3
HYDR	1345	Hydraulics & Pneumatics	3
ELPT	1341	Motor Control	3
ELPT	1325	National Electrical Code I	3
Semester Total			15
Second Semester - Spring			
ELPT	1311	Basic Electrical Theory	3
ELMT	1301	Programmable Logic Controllers	3
INCR	1302	Physics of Instrumentation	3
ELPT	1457	Industrial Wiring	4
Semester Total			13
Third Semester - Summer			
ELPT	2419	Programmable Logic Controllers I	4
ELPT	1355	Electronic Applications	3
ELPT	2449	Industrial Automation (Capstone)	4
Semester Total			11
Total Minimum Credits for the Level 1 Certificate			39

Workforce Degrees and Certificates

INDUSTRIAL ELECTRICITY - SOLAR PHOTOVOLTAIC SYSTEM INSTALLER

Certificate - Level 1

First Semester - Fall

			SCH
ELPT	1315	Electrical Calculations i	3
ELPT	1221	Introduction to Electrical Safety & Tools	2
ELMT	1311	Solar Fundamentals	3
ELPT	1325	National Electrical Code I	3
Semester Total			15

Second Semester - Spring

ELPT	1311	Basic Electrical Theory	3
ELMT	1402	Solar Photovoltaic Systems	4
Semester Total			7

Total Minimum Credits for the Level 1 Certificate **15**