

Air Conditioning Technology

Heating, Ventilation, and Air Conditioning

Mechanic Diploma



| Name | Empl. ID | Date Entered | Date Grad |
|------|----------|--------------|-----------|
| | | | |

| GENERAL EDUCATION COURSES | Credit | Res | Tr | Notes |
|--|----------|-----|----|-------|
| Written Communication, Oral Communications, Humanities, or Heritage | 3 | | | |
| Social and Behavioral Science, Natural Sciences, or Quantitative Reasoning | 3 | | | |
| GENERAL EDUCATION SUBTOTAL: | 6 | | | |

| TECHNICAL CORE COURSES | Credit | Res | Tr | Notes |
|---|--------------|-----|----|---|
| Digital Literacy (or bypass exam) | 0-3 | | | |
| ACR 100 Refrigeration Fundamentals <i>AND</i> ACR 101 Refrigeration Fundamentals Lab | 5 | | | Recommended first semester |
| EET 119 Basic Electricity* <i>OR</i> (ACR 102 HVAC Electricity <i>AND</i> ACR 103 HVAC Electricity Lab) | 5 | | | Recommended first semester Prereq: MAT 55 |
| ACR 130 Electrical Components <i>AND</i> ACR 131 Electrical Components Lab | 5 | | | Prereq: EET 119 or ACR 102 with C Recommended second semester |
| ACR 170 Heat Load/Duct Design | 3 | | | |
| ACR 250 Cooling and Dehumidification <i>AND</i> ACR 251 Cooling and Dehumidification Lab | 5 | | | Prereq: ACR 100 & 101 with grade of C or better |
| ACR 260 Heating and Humidification <i>AND</i> ACR 262 Heating and Humidification Lab | 5 | | | Prereq: ACR 102 & 103 with grade of C or better |
| ACR 270 Heat Pump Application <i>AND</i> ACR 271 Heat Pump Application Lab | 5 | | | Prereq: ACR 100 & 102 with grade of C or better or instructor consent |
| ACR 291 Special Problems I <i>OR</i> ACR 298 Practicum | 1-2 | | | |
| Air Conditioning Technology Electives | 8-11 | | | |
| TECHNICAL CORE SUBTOTAL: | 41-50 | | | |
| TOTAL DIPLOMA CREDITS | 47-56 | | | |

| *Comparable Electrical Courses | Credit | Res | Tr | Notes |
|---|--------|-----|----|-------|
| EET 154 Electrical Construction I <i>AND</i> EET 155 Electrical Construction I Lab | 4 | | | |
| ETT 112 Basic Electrical Theory: Telenetworking <i>AND</i> ETT 113 Basic Electrical Theory Lab | 4 | | | |
| ELT 110 Circuits I | 5 | | | |
| IMT 110 Industrial Maintenance Electrical Principles <i>AND</i> IMT 111 Industrial Maintenance Electrical Principles Lab | 5 | | | |

| Air Conditioning Technology Electives This list is not all inclusive. Other courses may be taken with approval of the program instructor/advisor. | Credit | Res | Tr | Notes |
|---|---------------|------------|-----------|--------------|
| ACR 112 Sheet Metal Fabrication | 3 | | | |
| ACR 113 Sheet Metal Fabrication Lab | 2 | | | |
| ACR 290 Journeyman Preparation | 3 | | | |
| ACR 293 Special Problems II | 2 | | | |
| ACR 295 Special Problems III | 3 | | | |
| ACR 299 Cooperative Education Program | 2 | | | |
| BAS 160 Introduction to Business | 3 | | | |
| BAS 267 Business Law | 3 | | | |
| BEX 100 Basic Electricity for Non-Majors | 3 | | | |
| BEX 101 Basic Electricity Lab for Non-Majors | 2 | | | |
| BRX 110 Basic Blueprint Reading for Machinist | 2 | | | |
| BRX 112 Blueprint Reading for Machinist | 4 | | | |
| BRX 120 Basic Blueprint Reading | 3 | | | |
| BRX 210 Mechanical Blueprint Reading for Machinist | 2 | | | |
| BRX 220 Blueprint Reading for Construction | 3 | | | |
| EET 150 Transformers | 2 | | | |
| EET 151 Transformers Lab | 1 | | | |
| EET 198 Practicum | 2 | | | |
| EET 250 National Electric Code | 4 | | | |
| EET 252 Electrical Construction II | 2 | | | |
| EET 254 Electrical Construction | 3 | | | |
| EET 254 Electrical Construction Lab | 4 | | | |
| EET 264 Rotating Machinery | 2 | | | |
| EET 265 Rotating Machinery Lab | 2 | | | |
| EET 266 Rotating Machinery and Transformers | 3 | | | |
| EET 267 Rotating Machinery and Transformers Lab | 3 | | | |
| EET 268 Rotating Machinery Electrical Motor Controls I | 3 | | | |
| EET 269 Rotating Machinery and Motor Controls I Lab | 4 | | | |
| EET 270 Electrical Motor Controls I | 2 | | | |
| EET 271 Electrical Motor Controls I Lab | 2 | | | |
| EET 272 Electrical Motor Controls II | 2 | | | |
| EET 273 Electrical Motor Controls II Lab | 2 | | | |
| EET 274 Electrical Motor Controls | 3 | | | |
| EET 275 Electrical Motor Controls Lab | 4 | | | |
| EET 276 Programmable Logic Controllers | 2 | | | |
| EET 277 Programmable Logic Controllers Lab | 2 | | | |
| EET 281 Special Problems I | 1 | | | |
| EET 283 Special Problems II | 2 | | | |
| EET 285 Special Problems III | 3 | | | |
| EET 286 Programmable Logic Controllers II | 2 | | | |
| EET 287 Programmable Logic Controllers II Lab | 2 | | | |
| EET 298 Practicum | 1-8 | | | |
| EET 299 Cooperative Education Program | 1-8 | | | |
| ELT 102 Blueprint Reading | 2 | | | |

| Air Conditioning Technology Electives This list is not all inclusive. Other courses may be taken with approval of the program instructor/advisor. | Credit | Res | Tr | Notes |
|---|---------------|------------|-----------|--------------|
| ELT 106 Mechanical Engineering Graphics | 2 | | | |
| ELT 107 Computer Applications for Technicians | 4 | | | |
| ELT 114 Circuits II | 5 | | | |
| ELT 118 Computer Numerical Control | 3 | | | |
| ELT 122 Mechanical Power Transmission Systems | 3 | | | |
| ELT 124 Mechanical Power Transmission Systems Lab | 1 | | | |
| ELT 201 Statics and Strength of Materials | 4 | | | |
| ELT 232 Computer Software Maintenance | 3 | | | |
| ELT 234 Computer Hardware Maintenance | 3 | | | |
| ELT 244 Electrical Machinery and Controls | 4 | | | |
| ELT 250 Programmable Logic Controllers | 4 | | | |
| ELT 261 Instrumentation and Measurements | 3 | | | |
| ELT 264 Mechanical Design | 4 | | | |
| ELT 265 Applied Fluid Power | 3 | | | |
| ELT 290 Selected Topics in Engineering Technology: (Topic) | 1-4 | | | |
| ELT 295 Independent Problems | 1-2 | | | |
| ETT 110 Voice and Data Installer Level I | 4 | | | |
| ETT 114 Voice and Data Installer Level II | 4 | | | |
| ETT 116 Fiber Optics Systems | 3 | | | |
| FPX 100 Fluid Power | 3 | | | |
| FPX 101 Fluid Power Lab | 2 | | | |
| IMT 100 Welding for Maintenance | 3 | | | |
| IMT 101 Welding for Maintenance Lab | 2 | | | |
| ISX 100 Industrial Safety | 3 | | | |
| MNG 123 Mining Electricity I | 4 | | | |
| PLB 100 Basic Theory of Plumbing | 3 | | | |
| PLB 105 Plumbing Principles | 3 | | | |
| PLB 150 Plumbing, Introduction to the Trade | 3 | | | |
| PLB 151 Basic Plumbing Skills | 3 | | | |
| PLB 262 Backflow Prevention | 3 | | | |
| WLD 152 Basic Welding B | 5 | | | |
| WLD 100 Oxy-Fuel Systems | 2 | | | |
| WLD 101 Oxy-Fuel Systems Lab | 2 | | | |
| WLD 110 Cutting Processes | 2 | | | |
| WLD 111 Cutting Processes Lab | 2 | | | |
| WLD 120 Shielded Metal Arc Welding | 2 | | | |
| WLD 121 Shielded Metal Arc Welding Fillet Lab | 2 | | | |

For a list of KCTCS general education classes in each category, go to

<https://kctcs.edu/education-training/course-catalog/2019-2020-KCTCS-Catalog.pdf> pp. 77-80.

Or KCTCS homepage (www.kctcs.edu)> education & training> course catalog> 2019-20 catalog> pp. 77-80.

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