Southeast Missouri Regional Tech Prep Education Program Course of Study

Heating, Air Conditioning, and Refrigeration Technology

Area Career Center or Comprehensive High School
Career Pathway: Industrial & Engineering Technology

Required for Admission:
• Average or Above Reading Ability

Prerequisite or co-requisite:
• Applied Mathematics I and II or Algebra I

All prerequisite courses must be completed with a grade of "C" or above

Not Required for Admission but Strongly Recommended High School Courses:
• Applied Communications
• Algebra II
• Principles of Technology I & II or Physics
• Geometry

Communication Electives
- ENG132 Applied Communications * (3) (Written)
- ENG133 English Composition I+ (3) (Written)
- ENG144 Public Speaking+ (3) (Oral)
- ENG167 Interpersonal Communications I (3) (Oral)
- TEC104 Technical Writing * (3) (Written)

Human Development Electives
- SOC113 General Sociology (3)
- SOC140 Human Relations * (3)
- PSY113 General Psychology I+ (3)
- PSY116 Applied Psychology (3)

History/Political Science Electives
- HIS123 American History I (3)
- HIS124 American History II (3)
- POS113 American National Government+ (3)
- POS114 American State and Local Government+ (3)
- POS133 International Relations (3)

Mathematics Electives
- MAT113 Intermediate Algebra * (3)
- MAT114 Applied Mathematics * (3)
- MAT123 College Algebra+* (3)
- MAT133 Trigonometry+* (3)
- MAT160 Calculus for Business/Social Sciences+* (3)
- MAT165 Analytical Geometry & Calculus I * (5)
- MAT215 Analytical Geometry & Calculus II * (5)
- TEC190 Technical Mathematics I * (3)
- TEC191 Technical Mathematics II * (3)

Physical Science Electives
- Any Physical Science course with a PHS prefix
- TEC107 Unified Technical Concepts I+* (4)
- TEC108 Unified Technical Concepts II +* (4)

Computer Literacy Electives
- CIS105 Introduction to Computers (3)
- CIS175 Microcomputer Applications * (3)

* Designates courses with prerequisites
+ Designates recommended courses for students planning to transfer to another institution or another program in the future

February, 2002

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- POS113 American National Government+ (3)
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Mathematics Electives
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- MAT114 Applied Mathematics * (3)
- MAT123 College Algebra+* (3)
- MAT133 Trigonometry+* (3)
- MAT160 Calculus for Business/Social Sciences+* (3)
- MAT165 Analytical Geometry & Calculus I * (5)
- MAT215 Analytical Geometry & Calculus II * (5)
- TEC190 Technical Mathematics I * (3)
- TEC191 Technical Mathematics II * (3)

Physical Science Electives
- Any Physical Science course with a PHS prefix
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- TEC108 Unified Technical Concepts II +* (4)

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MINERAL AREA COLLEGE
ASSOCIATE OF APPLIED SCIENCE

HEATING, AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

AHR100 Safety for the Heat/AC/Ref. Prof (cc)..... 3
AHR101 Air Conditioning & Refrigeration I (cc)..... 3
AHR103 Air Conditioning & Refrigeration II (cc).... 3
AHR109 Basic Welding for Heat/Ref/AC (cc)........3
AHR113 Basic Electricity for Heat/Ref/AC (cc).... 3
AHR120 Refrigeration Motors (cc)....................3
AHR130 Refrigeration Controls (cc)...............3
AHR140 Residential Cooling/Heating (cc)...........3
AHR150 Commercial Cooling/Heating (cc).........3
AHR152 Commercial Refrigeration (cc).............3
AHR160 Troubleshooting for Heat/Cool Sys. (cc) 3
AHR170 H, A/C, R Tech Internship I.................3
AHR172 H, A/C, R Tech Internship II..............3
PAW106 Preparation for Employment (cc)........1
PAW120 Occupational Leadership Dev. I (cc)......1
PAW122 Occupational Leadership Dev. II (cc)....1

Communication Electives (6):

Human Development Elective (3):

History/Political Science Elective (3):

Mathematics Electives (6 - 10):

Physical Science Elective (3 - 5):

Computer Literacy Elective (3):

Total Cr. Hrs. 66 - 72

(min) These courses are available only through the area career centers.

Revised: November, 2002