






The Academic Plan is a semester-by-semester plan for the full-time student. Part-time students should work with an advisor to customize the map to fit individual needs.

| ACADEMIC PLAN   |  | NOTES  |
|---|--|--|
| <b>Fall 1<sup>st</sup> Year</b>   |  | <b>Semester 1</b>  |
|   | COL101 Introduction to College                                       | 1<br>COL101 and Reading Proficiency are pre-reqs for some next semester course work                                  |
|   | HRA101 Electricity for HVAC  | 5<br>HRA101 with a grade of "C" or better is a pre-req for some next semester course work                            |
|   | HRA105 Principles of Refrigeration                                   | 5<br>HRA105 with a grade of "C" or better is a pre-req for some next semester course work                            |
|   | HRA145 Piping Design, Sizing, & Installation for HRA                 | 3  |
|   | MTH105 Industrial Math   | 3  |
| <b>Total Hours</b>  |  | <b>17</b>  |
| <b>Spring 1<sup>st</sup> Year</b>   |  | <b>Semester 2</b>  |
|   | HRA125 Refrigeration and A/C Mechanical Systems                      | 5<br>HRA125 with a grade of "C" or better and EPA certification are a required pre-req for next semester course work |
|   | HRA160 Sheet Metal Sizing, Design, and Install                       | 3  |
|   | HRA150 Customer Relations & Record Keeping                           | 2  |
|   | CIS125 Computers Concepts and Applications or Computer Literacy Exam | 3<br>CIS125 or exam fulfills Computer Literacy graduation requirement  |
|  | ENG101 English Composition I   | 3  |
|  | SOC101 General Sociology   | 3  |
| <b>Total Hours</b>  |  | <b>19</b>  |
| <b>Fall 2<sup>nd</sup> Year</b>   |  | <b>Semester 3</b>  |
|   | HRA205 Residential Gas Heating System                                | 4  |
|   | HRA210 Electric and Hydronic Heat                                    | 2  |
|   | HRA216 Residential Air-Conditioning Systems                          | 3  |
|   | HRA230 Advanced Electricity for HVAC                                 | 3  |
|   | HRA240 Heat Pumps and Mini Splits                                    | 3  |
|  | COM100 Fundamentals of Communication                                 | 3  |
| <b>Total Hours</b>  |  | <b>18</b>  |
| <b>Spring 2<sup>nd</sup> Year</b>   |  | <b>Semester 4</b>  |
|   | HRA249 Commercial Refrigeration Systems                              | 5  |
|   | HRA155 Duct, Envelope Testing and Leakage Detection                  | 2  |
|   | HRA135 Introduction to International Mechanical Code                 | 3  |
|  | BIO109 Ecology and Environmental Conservation                        | 3  |
|  | HST103 U.S. History I  | 3  |
| <b>Total Hours</b>  |  | <b>16</b>  |

**Program Description:** The Associate of Applied Science degree or certificate prepare students for employment as installers or technicians in the rapidly growing and increasingly technical field of Heating, Refrigeration, and Air Conditioning.

**Admission Requirements:** There are no specific admission requirements for this program. HRA coursework requires reading and a level of math proficiency. Certain general education coursework requires specific measures for placement. Please consult with a Jefferson College advisor for more information.

**Department Faculty Advisors:** William Kaune & Kati Donahue

**Associate Dean:** Maryanne Angliongto

**Employment Outlook/Median Salary\*:**

| Career  | Degree Level Required                         | ** Growth | Median Annual Salary |
|---|---|-----------|----------------------|
| Heating, Air Conditioning, and Refrigeration Mechanics and Installers | Post-Secondary non-degree award               | 5%        | \$48,630             |
| Sheet Metal Workers   | High School Diploma, or equivalent            | -1%       | \$53,440             |
| Pipefitter  | High School Diploma, Post-Secondary Preferred | 2%        | \$59,880             |

*\*Employment information based on current Bureau of Labor Statistics Occupational Outlook Handbook. \*\*Projected % of change in employment 2021-2031; the average for all occupations is 2%.*

**Jefferson College Program Highlights:**

The Heating, Refrigeration, and Air Conditioning Technology program at Jefferson College is accredited by HVAC Excellence, a national organization that has very rigorous standards for accreditation. The HVAC Excellence accreditation allows our students to take various industry recognized tests showcasing their employment readiness. The curriculum includes a full range of traditional Heating, Refrigeration, and Air Conditioning Technology training and new industry trends such as Mini-Split Systems and Solar Hot Water. The department has three labs each set up to be used for several different topics. The classes are set up so that a student can complete the program in two years attending either days or nights.

**Transfer Information:**



Courses with this symbol are guaranteed to transfer to any public college or university in Missouri.

Pursuing a higher degree? Get the most credit for your transfer and earn your Bachelor's degree from Missouri Baptist University by attending MBU courses at the Jefferson College, Hillsboro campus! The Associate of Applied Science degree in Heating, Refrigeration, and Air Conditioning Technology will transfer to Missouri Baptist University's Bachelor of Science in Applied Management.