



FERRIS STATE UNIVERSITY

Heating, Ventilation, Air Conditioning and Refrigeration B.S. Degree

WESTERN TECHNICAL COLLEGE Articulation Guide

ADMISSION REQUIREMENTS

- Associate degree in ACHR Technology from Western Technical College with a minimum GPA of 2.5
- Completion or competency in the equivalent to the following FSU courses:
 - ENGL 150 English I
 - ENGL 211 Industrial and Career Writing
 - MATH 115/MATH 116 Intermediate Algebra /Intermediate Algebra and Trigonometry
 - ISYS 105 Microcomputer Application

APPLICATION DEADLINES

It is recommended that students submit applications by January 15th prior to fall entry.

COLLEGE OF TECHNOLOGY

FSU	WTC	FSU Course Title	Cr. Hrs.
HVACR Major Courses for AAS Degree	WWTC ACHR Technology Associate Degree	Associate of Applied Science Degree in an HVACR engineering or related technical area or equivalent.	41
ENG 150	801 195	English I	3
ENGL 211	801 197	Technical & Career Writing	3
COMM 121	801 198	Fundamentals of Public Speaking	3
MATH 115 MATH 116	804 118 804 113 & 804 114	Intermediate Algebra Intermediate Algebra and Trigonometry	4
Gen. Ed. Elective		*1 Scientific Understanding: Complete one lab science course from the following subject areas: Biology, Chemistry, Geography, Physics, Physical Science, etc.	7
Gen. Ed. Elective		*2 Cultural Enrichment: Complete one course from the following subject areas: Art, History, Humanities, Literature, Music, Foreign Language, etc.	3
Gen. Ed. Electives		*3 Social Awareness: Complete one course from the following subject areas: Anthropology, Economics, Political Science, Psychology, Sociology, etc.	3
ISYS 105	107 140	Microcomputer Applications	3

*Contact the College of Technology educational counselor at Ferris State University if you have questions on specific transfer requirements. Email: nelsonv@ferris.edu, or call 231-591-2890.

REQUIRED DEGREE COURSE WORK				Prerequisite Requirements FSU Course #
FSU	Cr. Hrs.	FSU Course Title	WTC College Equivalent	
Fall				
HVAC 331	5	HVAC Secondary Equip Selection/Design	n/a	HVAC 235,245
Elective	3-4	Scientific Understanding	See *1 above	
MATH 126	4	Algebra and Analytic Trigonometry	804 116 or 804 197	MATH 116
ISYS 204	3	Basic Programming		
Winter				

FERRIS STATE UNIVERSITY/COLLEGE OF TECHNOLOGY
HVACR Engineering Technology B.S. Degree

REQUIRED DEGREE COURSE WORK				Prerequisite Requirements
FSU	Cr. Hrs.	FSU Course Title	WTC College Equivalent	FSU Course #
Fall				
HVAC 342	3	HVAC Load Calculations & Energy Code	n/a	HVAC 331
HVAC 312	4	HVAC Control Theory and Applications	n/a	HVAC 331
ECON 221	3	Principles of Economics 1	809 195	
Elective	3	Cultural Enrichment	See *2 above	
ARCH 110	2	Intro Cmptr Grphs in ARCH for HVAC	n/a	
Summer				
HVAC 393	4	Internship	n/a	
Fall				
HVAC 415	4	HVAC Diagnostic Control Systems	n/a	HVAC 312 MATH 126/130 ISYS 204
HVAC 462	4	Primary HVAC Equipment Selection	n/a	HVAC 342
HVAC 451	5	Energy Analysis and Audit (WIC)	n/a	HVAC 312,342
COMM 221	3	Small Group Decision Making		
Winter				
HVAC 499	5	Commercial HVAC System Design (WIC)	n/a	HVAC 451
Elective	3	Social Awareness (200+)	See *2 above	
Elective	3	Cultural Enrichment (200+)	See *3 above	

*These courses may be completed at Western Technical College; however, you must consult with Ferris Faculty Advisor prior to completing any of these courses due to timeline of completing program.

College of Technology

Home Page	Contact	Phone
http://www.ferris.edu/cot/	Michael Feutz; Department Chair College of Technology Ferris State University GRN 227B Big Rapids MI 49307 Email: feutzm@ferris.edu	1-800-4-FERRIS or 231/591-2351

TRANSFER PLAN

- **Coursework in HVACR Major** – In addition to the courses completed for the Associate Degree listed above, there may be other courses that can be completed at your college or another accredited college/university prior to transfer to Ferris that will meet requirements for the B.S. major. **NOTE: *First, check with a Ferris Faculty Advisor or the Department Chair (listed above) for academic advising prior to completing these courses.***
- **General Education Requirements** – All students earning a B.S. degree at Ferris State University must complete the Ferris State University *General Education Requirements*. Some of these general education requirements may have been completed as part of your associate degree, while others may be completed in addition to the associate degree at your college or another accredited college/university prior to transfer to Ferris, and others can be completed after transferring to Ferris. **NOTE: Because of the timeline required for the HVACR program, it is necessary that you *first check with a Ferris Faculty Advisor or the Department Chair (listed above) for academic advising prior to completing these courses.***
- Students must complete a minimum of 30 credit hours at Ferris to meet graduation requirements.
- You may visit the Ferris Transfer Equivalency website at:
<http://www.ferris.edu/admissions/Transfer/Guide/tech/hvac/homepage.htm>
- For assistance with the admission process, contact your transfer counselor at the community college or the transfer admissions officer at Ferris State University, Shari Chamberlain, at 1-800-4-FERRIS, chambers@ferris.edu