

UTILITY TECHNOLOGY
Associate in Applied Science (AAS) Degree

Minimum Credits: 60.0
Contact Hours: 76.5

INTRODUCTION: This Associated Degree program familiarizes students with utility industry tools, construction techniques, electrical theory, and equipment. Graduates meet the utility industry's need for trained, entry-level employees. It is the only Associate Degree program offered in Michigan designed specifically to prepare men and women to install and repair business and residential electrical, telephone, and CATV transmission systems.

GENERAL EDUCATION

COURSE	TITLE	CREDITS	CONTACT HOURS
ENG 111 or ENG 120	English Composition I or Applied Communications	3.0	3.0
ENG 112 or ENG 123	English Composition II or Technical Communication	3.0	3.0
MTH 110 or MTH 115	Technical Math I or Applied Algebra & Trigonometry I	3.0-5.0	4.0-6.0
PLS 221 or PLS 222 or HST 221 & HST 222	American Government Requirement	3.0-6.0	3.0-6.0
SPE 123	Public Communication	<u>3.0</u>	<u>3.0</u>
GENERAL EDUCATION CREDITS/CONTACT HOURS:		15.0-20.0	16.0-21.0

CORE PROGRAM COURSES

COURSE	TITLE	CREDITS	CONTACT HOURS
APP 100E	Electrical Studies for Trades ^A	3.0	4.0
APP 104E	AC / DC Fundamentals ^A	3.0	4.0
APP 107E	Specialty Wiring ^A	3.0	4.0
APP 106M	Industrial Safety ^A	0.5	0.5
EPT 230	Poly-Phase Metering ^A	3.0	4.0
PEH 263	Workplace First Aid / CPR / AED	1.0	1.0
CIS 120	Introduction to Microcomputers	3.0	4.0
SDE 201	Job Search Strategies	1.0	1.0
UTT 101	Introduction to the Utility Industry ^A	0.5	0.5
UTT 102	Climbing elevated Work Sites ^A	1.0	1.0
UTT 103	Overhead Construction ^A	1.0	1.0
UTT 110	Utility / Line Mechanics Lab	6.0	10.5
UTT 201	Test Equipment & Troubleshooting ^A	1.0	1.0
UTT 202	Transformer Fundamentals ^A	2.0	3.0
UTT 203	Underground Construction ^A	2.0	2.0
UTT 204	System Design & Operation ^A	4.0	4.0
UTT 206	Equipment & Vehicle Operations ^A	2.0	3.0
UTT 207	Environmental Concerns of the Utility Industry ^A	1.0	1.0
UTT 208	Climbing & Working in Elevated Work Sites ^A	2.0	2.0
UTT 210	Utility / Line Mechanic lab ^A	<u>5.0</u>	<u>9.0</u>
CORE PROGRAM CREDITS/CONTACT HOURS:		<u>45.0</u>	<u>60.5</u>
TOTAL MINIMUM PROGRAM CREDITS/CONTACT HOURS:		60.0	76.5

SUGGESTED SEQUENCING OF COURSES

YEAR 1 (FALL SEMESTER) <u>18.0-20.0</u> CREDITS		CREDITS	CONTACT HRS	YEAR 1 (SPRING SEMESTER) <u>18.0</u> CREDITS		CREDITS	CONTACT HRS
APP 106M Industrial Safety	0.5	0.5	UTT 201 Test Equip / Troubleshooting	1.0	1.0		
APP 100E Electrical Studies for Trades	3.0	4.0	UTT 202 Transformer Fundamentals	2.0	3.0		
MTH 110 or MTH 115 Tech Math I or Appl Algebra & Trig I	3.0-5.0	4.0-6.0	UTT 204 System Design & Operation	4.0	4.0		
UTT 101 Intro to the Utility Industry	0.5	0.5	UTT 206 Equipment / Vehicle Operations	2.0	3.0		
UTT 102 Climbing elevated Work Sites	1.0	1.0	UTT 207 Envir Concerns of the Utility Ind	1.0	1.0		
UTT 103 Overhead Construction	1.0	1.0	UTT 208 Climbing & Working in Elevated Work Sites	2.0	2.0		
UTT 110 Utility / Line Mechanics Lab	6.0	10.5	UTT 210 Utility / Line Mechanic Lab	5.0	9.0		
UTT 203 Underground Construction	2.0	2.0	PEH 263 Workplace First Aid / CPR / AED	<u>1.0</u>	<u>1.0</u>		
SDE 201 Job Search Strategies	<u>1.0</u>	<u>1.0</u>	TOTAL	18.0	24.0		
TOTAL	18.0-20.0	24.5					
YEAR 2 (FALL SEMESTER) <u>12.0</u> CREDITS		CREDITS	CONTACT HRS	YEAR 2 (SPRING SEMESTER) <u>12.0-15.0</u> CREDITS		CREDITS	CONTACT HRS
APP 107E Specialty Wiring	3.0	4.0	APP 104E AC / DC Fundamentals	3.0	4.0		
CIS 120 Introduction to Microcomputers	3.0	4.0	ENG 112 or ENG 123 English or Tech Comm	3.0	3.0		
ENG111 or ENG120 English or Applied Comm	3.0	3.0	American Government Requirement	3.0-6.0	3.0-6.0		
SPE 123 Public Communications	<u>3.0</u>	<u>3.0</u>	EPT 230 Poly-Phase Metering	<u>3.0</u>	<u>4.0</u>		
TOTAL	12.0	14.0	TOTAL	12.0-15.0	14.0-17.0		

NOTES:

^AIncluded in occupational specialty – GPA of 2.0 or higher must be maintained in the area of occupational specialty.

Students must be able to climb 40-foot power poles to successfully compete the first semester. Each student is expected to have: hard hat; lineman belt, safety strap, and climbers; rain wear; safety glasses; various hand tools required by the trade; and work shoes at an approximate cost of \$1,800.