

# UTILITY TECHNOLOGY

## ASSOCIATE IN APPLIED SCIENCE (AAS) DEGREE

DESCRIPTION: This Associate 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 REQUIREMENTS CREDITS: 15

ENG 120 or ENG 111	APPLIED COMMUNICATION (3/3) or ENGLISH COMPOSITION I (3/3)
ENG 123 or ENG 112	TECHNICAL COMMUNICATION (3/3) or ENGLISH COMPOSITION II (3/3)
MTH 110 or higher	TECHNICAL MATH I (3/4)
PLS 221 or PLS 222 or HST 221 & HST 222	AMERICAN GOVERNMENT REQUIREMENT (3/3)
SPE 123 or SPE 121	PUBLIC COMMUNICATION (3/3) or SPEECH COMMUNICATION (3/3)

### CORE PROGRAM REQUIREMENTS CREDITS: 47

APP 100E	ELECTRICAL STUDIES FOR TRADES (3/4) <sup>A</sup>
APP 104E	AC/DC FUNDAMENTALS (3/4) <sup>A</sup>
APP 107E or CNS 151	SPECIALTY WIRING (3/4) <sup>A</sup> or NETWORK COMMUNICATION CABLING (3/4)
APP 106M	INDUSTRIAL SAFETY (1/1) <sup>A</sup>
EPT 230 PEH 263	POLY-PHASE METERING (2/3) <sup>A</sup> WORKPLACE FIRST AID/CPR/AED (1/1)
IND 120 or CIS 120	INDUSTRIAL COMPUTERS & NETWORKING (3/4) or INTRODUCTION TO MICROCOMPUTERS (3/4)
SDE 201	JOB SEARCH STRATEGIES (1/1)
UTT 101	INTRODUCTION TO THE UTILITY INDUSTRY (1/1) <sup>A</sup>
UTT 102	CLIMBING ELEVATED WORK SITES (1/1) <sup>A</sup>
UTT 103	OVERHEAD CONSTRUCTION (1/1) <sup>A</sup>
UTT 110	LINE MECHANICS LAB I (6/10.5)
UTT 111	LINE WORKER PHYSICAL FITNESS I (2/3)
UTT 202	TRANSFORMER FUNDAMENTALS (2/3) <sup>A</sup>
UTT 203	UNDERGROUND CONSTRUCTION (2/2) <sup>A</sup>
UTT 204	SYSTEM DESIGN & OPERATIONS (4/4) <sup>A</sup>
UTT 206	EQUIPMENT/VEHICLE OPERATIONS (2/3) <sup>A</sup>
UTT 208	CLIMBING & WORKING IN ELEVATED WORK SITES (2/2) <sup>A</sup>
UTT 210	UTILITY/LINE MECHANIC LAB (5/9) <sup>A</sup>
UTT 211	LINE WORKER PHYSICAL FITNESS II (2/3)

### MINIMUM 62 CREDIT HOURS/80.5 CONTACT HOURS

#### NOTES:

<sup>A</sup> Included in occupational specialty.

GPA of 2.0 or higher must be maintained in occupational specialty courses

Students must be able to climb 40-foot power poles to successfully complete 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 for an approximate cost of \$1,800.

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## ASSOCIATE IN APPLIED SCIENCE (AAS) DEGREE SUGGESTED SEQUENCE OF COURSES

### YEAR 1 (FALL SEMESTER)

CREDITS: 17

APP 100E	ELECTRICAL STUDIES FOR TRADES (3/4)
APP 107E or CNS 151	SPECIALTY WIRING (3/4) or NETWORK COMMUNICATION CABLING (3/4)
ENG 120 or ENG 111	APPLIED COMMUNICATION (3/3) or ENGLISH COMPOSITION I (3/3)
IND 120 or CIS 120	INDUSTRIAL COMPUTERS & NETWORKING (3/4) or INTRODUCTION TO MICROCOMPUTERS (3/4)
MTH 110 or higher	TECHNICAL MATH I (3/4)
UTT 206	EQUIPMENT/VEHICLE OPERATIONS (2/3)

### YEAR 1 (SPRING SEMESTER)

CREDITS: 15

APP 104E	AC/DC FUNDAMENTALS (3/4)
ENG 123 or ENG 112	TECHNICAL COMMUNICATION (3/3) or ENGLISH COMPOSITION II (3/3)
EPT 230 PEH 263	POLY-PHASE METERING (2/3) WORKPLACE FIRST AID/CPR/AED (1/1)
PLS 221 or PLS 222 or HST 221 & HST 222	AMERICAN GOVERNMENT REQUIREMENT (3-6/3-6)
SPE 123 or SPE 121	PUBLIC COMMUNICATION (3/3) or SPEECH COMMUNICATION (3/3)

### YEAR 2 (FALL SEMESTER)

CREDITS: 15

APP 106M	INDUSTRIAL SAFETY (1/1)
SDE 201	JOB SEARCH STRATEGIES (1/1)
UTT 101	INTRODUCTION TO THE UTILITY INDUSTRY (1/1)
UTT 102	CLIMBING ELEVATED WORK SITES (1/1)
UTT 103	OVERHEAD CONSTRUCTION (1/1)
UTT 110	LINE MECHANICS LAB I (6/10.5)
UTT 111	LINE WORKER PHYSICAL FITNESS I (2/3)
UTT 203	UNDERGROUND CONSTRUCTION (2/2)

### YEAR 2 (SPRING SEMESTER)

CREDITS: 15

UTT 202	TRANSFORMER FUNDAMENTALS (2/3)
UTT 204	SYSTEM DESIGN & OPERATIONS (4/4)
UTT 208	CLIMBING & WORKING IN ELEVATED WORK SITES (2/2)
UTT 210	UTILITY/LINE MECHANIC LAB (5/9)
UTT 211	LINE WORKER PHYSICAL FITNESS II (2/3)