# GENERAL TECHNOLOGY
# INDUSTRIAL MAINTENANCE PATHWAY

## 2024-25 DEGREE PLAN
### Associate of Applied Science: 60 Credits

| REQUIRED ACADEMIC CORE | |
|---|---|
| TECH 12074 Technical Success Strategies | 4 |
| TECH 11163 Workplace Writing (or higher) | 3 |
| MATH 10103 Technical Math (or higher) | 3 |
| CPSI 10003 Microcomputer Applications | 3 |
| Choose 1: ECON/HIST/PLSC/PSYC/SOCI/SPAN | 3 |
| **Academic Core Requirements** | **16** |

| INDUSTRIAL MAINTENANCE REQUIREMENTS | |
|---|---|
| TECH 12064 Technical Fundamentals | 4 |
| AMST 14004 Basic Electricity | 4 |
| AMST 11004 Hydraulics/Pneumatics | 4 |
| AMST 10004 Mechanical Devices/Systems I | 4 |
| AMST 20004 Mechanical Devices/Systems II | 4 |
| AMST 14004 Industrial Motor Controls | 4 |
| AMST 13004 Programmable Logic Controls (PLCs)I | 4 |
| AMST 24004 Industrial Wiring w/NEC | 4 |
| AMST 26004 Programmable Logic Controls (PLCs) with Instrumentation II | 4 |
| WELD 23464 Welding I – SMAW I | 4 |
| WELD 23564 Welding II – SMAW II | 4 |
| **Industrial Maintenance Requirements** | **44** |

| Certificate of Proficiency: Hydraulics/Pneumatics | 12 |
|---|---|
| TECH 12064 Technical Fundamentals | 4 |
| AMST 11004 Hydraulics/Pneumatics | 4 |
| AMST 10004 Mechanical Devices I –OR– AMST 20004 Mechanical Devices II | 4 |

| Certificate of Proficiency: Mechanical Devices | 12 |
|---|---|
| TECH 12064 Technical Fundamentals | 4 |
| AMST 10004 Mechanical Devices/Systems I | 4 |
| AMST 20004 Mechanical Devices/Systems II | 4 |

| Certificate of Proficiency: SMAW Welding | 12 |
|---|---|
| TECH 12064 Technical Fundamentals | 4 |
| WELD 23464 Welding I – SMAW I | 4 |
| WELD 23564 Welding II – SMAW II | 4 |

| Technical Certificate: Industrial Technology | 38 |
|---|---|
| TECH 12074 Technical Success Strategies | 4 |
| TECH 11163 Workplace Writing (or higher) | 3 |
| MATH 10103 Technical Math (or higher) | 3 |
| TECH 12064 Technical Fundamentals | 4 |
| AMST 14004 Basic Electricity | 4 |
| AMST 11004 Hydraulics/Pneumatics | 4 |
| AMST 10004 Mechanical Devices/Systems I | 4 |
| AMST 20004 Mechanical Devices/Systems II | 4 |
| WELD 23464 Welding I – SMAW I | 4 |
| WELD 23564 Welding II – SMAW II | 4 |

| Technical Certificate: Industrial Electricity | 34 |
|---|---|
| TECH 12074 Technical Success Strategies | 4 |
| TECH 11163 Workplace Writing (or higher) | 3 |
| MATH 10103 Technical Math (or higher) | 3 |
| TECH 12064 Technical Fundamentals | 4 |
| AMST 14004 Basic Electricity | 4 |
| AMST 14004 Industrial Motor Controls | 4 |
| AMST 13004 Programmable Logic Controls (PLCs)I | 4 |
| AMST 24004 Industrial Wiring w/NEC | 4 |
| AMST 26004 Programmable Logic Controls (PLCs) with Instrumentation II | 4 |

| Certificate of Proficiency: Industrial Motor Controls | 12 |
|---|---|
| TECH 12064 Technical Fundamentals | 4 |
| AMST 14004 Basic Electricity | 4 |
| AMST 14004 Industrial Motor Controls | 4 |

| Certificate of Proficiency: Programmable Controls | 20 |
|---|---|
| TECH 12064 Technical Fundamentals | 4 |
| AMST 14004 Basic Electricity | 4 |
| AMST 14004 Industrial Motor Controls | 4 |
| AMST 13004 Programmable Logic Controls (PLCs)I | 4 |
| AMST 26004 Programmable Logic Controls (PLCs) with Instrumentation II | 4 |

**ADVISOR:** Tiana Kelly tkelly@cccua.edu

**Eligible for ARFuture Grant ADHE Scholarship Application Management System - Scholarship - ARFUTURE**

**PROGRAM INFORMATION:** This degree was co-designed with local manufacturers to ensure the curriculum is relevant and up to date. While in the program, students will earn stackable credentials; Certificates of Proficiency in Mechanical Devices, Hydraulics and Pneumatics, Industrial Motor Controls, Programmable Controls, and Welding will lead to Technical Certificates in Industrial Technology and Industrial Electricity. All hours will apply toward the Associate of Applied Science in General Technology degree. Students will gain the skills needed to perform duties required in industrial maintenance settings. After the successful completion of the Industrial Fundamentals course, which follows the NCCER curriculum, students will have the opportunity to earn a nationally recognized industry certification.

**CAREER OPTIONS:** Industrial Technology provides students with the skills needed to perform general duties required in entry-level maintenance or production jobs with greatly increased employment opportunity. The skillsets learned in the Industrial Electricity certificate may be applied toward a career in industrial electricity or in support of a multi-craft degree.

# GENERAL TECHNOLOGY
# GENERAL AND PIPE WELDING PATHWAY

## 2024-25 DEGREE PLAN
### Associate of Applied Science: 72 Credits

| REQUIRED ACADEMIC CORE | | |
|---|---|---|
| | TECH 12074 Technical Success Strategies | 4 |
| | TECH 11163 Workplace Writing (or higher) | 3 |
| | MATH 10103 Technical Math (or higher) | 3 |
| | CPSI 10003 Microcomputer Applications | 3 |
| | Choose 1: ECON/HIST/PLSC/PSYC/SOCI/SPAN | 3 |
| Academic Core Requirements | | 16 |

| GENERAL AND PIPE WELDING REQUIREMENTS | | |
|---|---|---|
| | TECH 12064 Technical Fundamentals | 4 |
| | WELD 23464 Welding I – SMAW I | 4 |
| | WELD 23564 Welding II – SMAW II | 4 |
| | WELD 23667 Welding III – MIG (GMAW) | 7 |
| | WELD 23767 Welding IV – TIG (GTAW) | 7 |
| | WELD 22064 Pipe Welding-FCAW | 4 |
| | WELD 21164 Pipe Welding-GMAW | 4 |
| | WELD 24064 Pipe Welding-GTAW-Low Alloy and Stainless Steel | 4 |
| | WELD 23064 Pipe Welding-GTAW-Carbon Steel | 4 |
| | WELD 21067 Pipe Welding-SMAW | 7 |
| | WELD 22167 Pipe Welding-SMAW-Stainless Steel | 7 |
| Industrial Maintenance Requirements | | 56 |

| Certificate of Proficiency: SMAW Welding | | 12 |
|---|---|---|
| | TECH 12064 Technical Fundamentals | 4 |
| | WELD 23464 Welding I – SMAW I | 4 |
| | WELD 23564 Welding II – SMAW II | 4 |

| Certificate of Proficiency: TIG (GTAW) Welding | | 11 |
|---|---|---|
| | TECH 12064 Technical Fundamentals | 4 |
| | WELD 23767 Welding IV – TIG (GTAW) | 7 |

| Certificate of Proficiency: SMAW Pipe Welding | | 7 |
|---|---|---|
| | WELD 21067 Pipe Welding--SMAW | 7 |

| Certificate of Proficiency: GMAW/FCAW Pipe Welding | | 8 |
|---|---|---|
| | WELD 22064 Pipe Welding-FCAW | 4 |
| | WELD 21164 Pipe Welding-GMAW | 4 |

| Technical Certificate: Welding Technology | 30 |
|---|---|
| *TECH 11163 Workplace Writing** | *3* |
| *MATH 10103 Technical Math*** | *3* |
| TECH 12074 Technical Success Strategies | 4 |
| TECH 12064 Technical Fundamentals | 4 |
| WELD 23464 Welding I – SMAW I | 4 |
| WELD 23564 Welding II – SMAW II | 4 |
| WELD 23667 Welding III – MIG (GMAW) | 7 |
| WELD 23767 Welding IV – TIG (GTAW) | 7 |

| Technical Certificate: Pipe Welding Technology | 34 |
|---|---|
| *TECH 11163 Workplace Writing** | 3 |
| *MATH 10103 Technical Math*** | 3 |
| TECH 12074 Technical Success Strategies | 4 |
| WELD 22064 Pipe Welding-FCAW | 4 |
| WELD 21164 Pipe Welding-GMAW | 4 |
| WELD 24064 Pipe Welding-GTAW-Low Alloy and Stainless Steel | 4 |
| WELD 23064 Pipe Welding-GTAW-Carbon Steel | 4 |
| WELD 21067 Pipe Welding-SMAW | 7 |
| WELD 22167 Pipe Welding-SMAW-Stainless Steel | 7 |

| Certificate of Proficiency: MIG (GMAW) Welding | | 11 |
|---|---|---|
| | TECH 12064 Technical Fundamentals | 4 |
| | WELD 23667 Welding III – MIG (GMAW) | 7 |

| Certificate of Proficiency: GTAW Pipe Welding | | 8 |
|---|---|---|
| | WELD 24064 Pipe Welding-GTAW-Low Alloy and Stainless Steel | 4 |
| | WELD 23064 Pipe Welding-GTAW-Carbon Steel | 4 |

| Certificate of Proficiency: SMAW Stainless Steel Pipe Welding | | 7 |
|---|---|---|
| | WELD 22167 Pipe Welding-SMAW-Stainless Steel | 7 |

**ADVISOR: Tiana Kelly tkelly@cccua.edu**

**Eligible for ARFuture Grant ADHE Scholarship Application Management System - Scholarship - ARFUTURE**

**PROGRAM INFORMATION:** *Students must complete a Technical Certificate in Welding Technology prior to entering the Pipe Welding Certificate program*. National Center for Construction Education and Research (NCCER) curriculum will be used for instruction toward both NCCER accreditation and American Welding certification; additional work experience may be necessary depending on the level of proficiency in various forms of welding developed during instruction.

**CAREER OPTIONS:** The Technical Certificates and Certificates of Proficiency focus on welding processes designed to develop the skills necessary for entry into industrial and commercial welding employment. Pipe Welding is an advanced welding program designed to prepare graduates for employment in pipe welding related jobs and/or higher paying jobs in general welding positions.

# GENERAL TECHNOLOGY COSMETOLOGY PATHWAY

## 2024-25 DEGREE PLAN
### Associate of Applied Science: 61 Credits

| AAS GENERAL TECHNOLOGY COSMO REQUIREMENTS | |
|---|---|
| UNIV 10152 Success Strategies | 2 |
| CPSI 10003 Microcomputer Apps | 3 |
| TECH 11163 Workplace Writing (or higher) | 3 |
| MATH 11103 Applied Math | 3 |
| ACCT 20003 Accounting I | 3 |
| MKTG 22253 Marketing | 3 |
| MKTG 21253 Social Media Marketing | 3 |
| UNIV 10161 Career Seminar | 1 |
| COSM 11116 Cosmetology (Fall) | 16 |
| COSM 12116 Cosmetology (Spring) | 16 |
| COSM 21038 Cosmetology (Summer) | 8 |
| TOTAL | 61 |

| Technical Certificate: Cosmetology | 40 |
|---|---|
| COSM 11116 Cosmetology (Fall) | |
| COSM 12116 Cosmetology (Spring) | |
| COSM 21038 Cosmetology (Summer) | |

**PROGRAM INFORMATION:** The Cosmetology program is designed to provide students with the theoretical and practical instruction required as a pre-requisite to qualify for licensure examination by the Arkansas State Board of Cosmetology. Eligibility for the Cosmetology program requires either a high school diploma or GED. Enrollment is limited to full-time only; part-time enrollment is not permitted. Daily attendance is mandatory. Students must enroll in three consecutive semesters (including summer term). Eligible students are accepted on a first come/first serve basis. Special payment requirements and semester calendars exist. Students may transfer up to 600 clock hours from other cosmetology programs into the UA Cossatot program. Students lacking enough hours for program completion after three semesters of enrollment will be considered for an additional semester on a case-by-case basis, permitting seats are available. Additional hours will be charged at $10 per clock hour.

| Score Requirements | | | |
|---|---|---|---|
| Subject | Next Gen | ACT | Accuplacer |
| Reading | 225 | 15 | 57 |
| Writing | 244 | 15 | 71 |
| Math | Math is embedded into the program curriculum | | |

Students not meeting minimum score in Reading or Writing must complete developmental courses prior to entering the program.