Pathway

Manufacturing, Construction Crafts and Logistics

Integrated Pathway

The Manufacturing, Construction Crafts and Logistics graduation pathway is an Integrated pathway. Students must:

- 1) pass 9 Carnegie credits of courses from this pathway;
- 2) including at least one Career Readiness course (one Carnegie credit);
- 3) attain one Statewide credential (or the LCTCS equivalent certificate / diploma); OR
- 4) one Core credential (or the LCTCS equivalent certificate / diploma); and
- 5) two Complementary credentials.

High-Demand Careers Related to this Pathway

5 Star: Service Unit Operator; Heating, Air Conditioning & Refrigeration Mechanic & Installer; Cost Estimator; Inspector, Mechanical Engineer; Welder

4 Star: Derrick Operators; Rotary Drill Operator; Roustabouts; Bus & Truck Mechanic; Diesel Engine Specialist; Farm Equipment Mechanic and Service Technician; AgriScience Teacher

3 Star: Engine & Other Machine Assembler

Also: Industrial Engineering Technicians, Petroleum Pump Systems Operators, Refinery Operators, Chemical Plant and System Operators, Maintenance Workers, Electricians, Construction Mangers, Manchinists, Mechanical Drafters

Starting Salary Ranges for this Pathway

\$25,000 - \$38,000

| | Manufacturing, Construction Crafts and Logistics Graduation Pathway: Sections | | | |
|-----------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| | | This section lists the course titles and codes for courses specific to this pathway | | |
| Courses "01", " | | Each table also indicates those courses that qualify for the basic 6% CTE adder (course codes beginning with "01", "04", "07", "08", "09", "10", "11" or "31" are CTE courses) as well as those courses that qualify for the additional 6% Career Development Fund (or CDF) payment. | | |
| 2 | Universal Jump Start Courses | This section lists the course titles and course codes for courses that are part of every Jump Start graduation pathway | | |
| 3 | Career Readiness Courses | This section lists the course titles and codes for courses that qualify as Career Readiness Courses. Students must pass at least one Carnegie credit of Career Readiness courses, but may apply more than one Career Readiness course to their 9 credit Jump Start graduation requirement. | | |

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| Pathway Manufacturing, Construction Crafts and Logistics |
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| 4 | Internships This section indicates the three types of internships and the appropriate course codes. | | |
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| 5 | Culminating Credentials | Culminating Credentials This section indicates the required culminating credential(s) for this pathway. | |
| 6 | Sample Schedule | This section provides a sample schedule for students pursuing this graduation pathway. Each high school will develop its own standard schedules for Jump Start students. | |

Jump Start Graduation Pathway Revision Policy

Jump Start graduation pathways are continuously updated. Please use the most updated graduation pathways.

Future changes to Jump Start graduation pathways will always increase student opportunities. No one will ever need to compare an old pathway with an updated pathway.

Please send any recommended graduation pathway changes to JumpStart@la.gov using the subject line: Recommended Graduation Pathway Change.

The Department reserves the right to make administrative updates to Jump Start graduation pathways, including but not limited to updating course codes, correcting errors on course codes, correcting spelling errors and other similar changes.

The Department reserves the right to delete courses no longer meeting state standards. When this occurs, the Department may add a section to the graduation pathway indicating: "Courses Deleted from this Graduation Pathway."

The Department reserves the right to make changes on credentialing requirements based on guidance provided by the Jump Start Graduation Pathways Review Panel. (Please see the *All Things Jump Start* web portal for information about this Panel.) The Department will also maintain contact with certifying agencies and the Workforce Investment Council (WIC) to update the Statewide, Core and Complementary credentials indicated in each graduation pathway.

Louisiana educators can seek assistance with Jump Start graduation pathways at any time by emailing their questions to JumpStart@la.gov

Help Resources

Please see the updated *All Things Jump Start* web portal: http://www.louisianabelieves.com/courses/all-things-jump-start/ The updated portal provides easier access to:

- updated Jump Start graduation pathways;
- updated industry credential fact sheets that provide comprehensive details on over 100 Jump Start industry credentials;
- guidance on how your school can implement workplace internships and virtual workplace experiences; and much, much more.

| Pathway-Specific Courses: Manufacturing, Construction Crafts and Logistics | | | | |
|----------------------------------------------------------------------------|-------------|------------------|----------|---------------|
| Course Title | Course Code | Carnegie Credits | CTE 6% | CDF 6% |
| AGRISCIENCE I | 010301 | 1 | ~ | |
| AGRISCIENCE II | 010302 | 1 | ~ | |
| AGRISCIENCE III | 010303 | 1 | ~ | V |
| AGRISCIENCE IV | 010304 | 1 | ~ | |
| COOPERATIVE AGRISCIENCE EDUCATION I (3 CREDITS) | 010323 | 3 | ~ | |
| COOPERATIVE AGRISCIENCE EDUCATION II (3 CREDITS) | 010325 | 3 | ~ | |
| Career Readiness Agriscience Agribusiness Natural Resources | 010331 | 1 | ~ | |
| AGRISCIENCE-CONSTRUCTION (1/2 CREDIT) | 010344 | 1/2 | ~ | |
| AGRISCIENCE-LEADERSHIP DEVELOPMENT (1/2 CREDIT) | 010354 | 1/2 | ~ | |
| AG LEADERSHIP (1 CREDIT) | 010364 | 1 | ~ | |
| AG CONST. TECH (1 CREDIT) | 010444 | 1 | ~ | |
| AG POWER EQUIPMENT (1 CREDIT) | 010446 | 1 | ~ | |
| NCCER CARPENTRY IN AGRISCIENCE (1 CREDIT) | 010601 | 1 | ~ | V |
| NCCER CARPENTRY IN AGRISCIENCE (2 CREDITS) | 010602 | 2 | V | V |
| NCCER CARPENTRY IN AGRISCIENCE (3 CREDITS) | 010603 | 3 | V | V |
| NCCER Carpentry in Agriscience II (1 credit) | 010604 | 1 | V | V |

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| NCCER Carpentry in Agriscience II (2 credit) | 010605 | 2 | ~ | ~ |
|-----------------------------------------------|--------|---|---|----------|
| NCCER Carpentry in Agriscience II (3 credit) | 010606 | 3 | ~ | ~ |
| NCCER Carpentry in Agriscience III (1 credit) | 010607 | 1 | ~ | V |
| NCCER Carpentry in Agriscience III (2 credit) | 010608 | 2 | ~ | ✓ |
| NCCER Carpentry in Agriscience III (3 credit) | 010609 | 3 | ~ | ✓ |
| NCCER Carpentry in Agriscience IV (1 credit) | 010610 | 1 | ~ | v |
| NCCER Carpentry in Agriscience IV (2 credit) | 010611 | 2 | ~ | ✓ |
| NCCER Carpentry in Agriscience IV (3 credit) | 010612 | 3 | ~ | ✓ |
| NCCER ELECTRICAL IN AGRISCIENCE (1 CREDIT) | 010701 | 1 | ~ | ✓ |
| NCCER ELECTRICAL IN AGRISCIENCE (2 CREDITS) | 010702 | 2 | ~ | ✓ |
| NCCER ELECTRICAL IN AGRISCIENCE (3 CREDITS) | 010703 | 3 | ~ | ✓ |
| NCCER Electrical in Agriscience II (1CR) | 010704 | 1 | ~ | ✓ |
| NCCER Electrical in Agriscience II (2CR) | 010705 | 2 | ~ | ✓ |
| NCCER Electrical in Agriscience II (3CR) | 010706 | 3 | ~ | V |
| NCCER Electrical in Agriscience III (1CR) | 010707 | 1 | ~ | v |
| NCCER Electrical in Agriscience III (2CR) | 010708 | 2 | ~ | v |
| NCCER Electrical in Agriscience III (3CR) | 010709 | 3 | ~ | v |
| NCCER Electrical in Agriscience IV (1 CR) | 010710 | 1 | ~ | v |

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| NCCER Electrical in Agriscience IV (2 CR) | 010711 | 2 | ~ | V |
|-------------------------------------------------|--------|---|---|----------|
| NCCER Electrical in Agriscience IV (3 CR) | 010712 | 3 | ~ | ~ |
| NCCER PIPEFITTING IN AGRISCIENCE (1 CREDIT) | 010801 | 1 | ~ | V |
| NCCER PIPEFITTING IN AGRISCIENCE (2 CREDITS) | 010802 | 2 | ~ | ~ |
| NCCER PIPEFITTING IN AGRISCIENCE (3 CREDITS) | 010803 | 3 | ~ | V |
| NCCER Pipefitting in Agriscience II (1 credit) | 010804 | 1 | ~ | V |
| NCCER Pipefitting in Agriscience II (2 credit) | 010805 | 2 | ~ | V |
| NCCER Pipefitting in Agriscience II (3 credit) | 010806 | 3 | ~ | V |
| NCCER Pipefitting in Agriscience III (1 credit) | 010807 | 1 | ~ | v |
| NCCER Pipefitting in Agriscience III (2 credit) | 010808 | 2 | ~ | V |
| NCCER Pipefitting in Agriscience III (3 credit) | 010809 | 3 | ~ | V |
| NCCER Pipefitting in Agriscience IV (1 credit) | 010810 | 1 | ~ | v |
| NCCER Pipefitting in Agriscience IV (2 credit) | 010811 | 2 | ~ | V |
| NCCER Pipefitting in Agriscience IV (3 credit) | 010812 | 3 | ~ | V |
| NCCER WELDING IN AGRISCIENCE (1 CREDIT) | 010901 | 1 | ~ | V |
| NCCER WELDING IN AGRISCIENCE (2 CREDITS) | 010902 | 2 | ~ | V |
| NCCER WELDING IN AGRISCIENCE (3 CREDITS) | 010903 | 3 | ~ | V |
| NCCER Welding in Agriscience II (1 credit) | 010904 | 1 | ~ | V |

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| NCCER Welding in Agriscience II (2 credits) | 010905 | 2 | ~ | ~ |
|----------------------------------------------------------------------------------|--------|---|---|----------|
| NCCER Welding in Agriscience II (3 credits) | 010906 | 3 | ~ | ~ |
| NCCER Welding in Agriscience III (1 credit) | 010907 | 1 | ~ | ✓ |
| NCCER Welding in Agriscience III (2 credits) | 010908 | 2 | ~ | ✓ |
| NCCER Welding in Agriscience III (3 credits) | 010909 | 3 | ~ | v |
| NCCER Welding in Agriscience IV (1 credit) | 010910 | 1 | ~ | v |
| NCCER Welding in Agriscience IV (2 credits) | 010911 | 2 | ~ | v |
| NCCER Welding in Agriscience IV (3 credits) | 010912 | 3 | ~ | v |
| Introduction to Manufacturing C4M in Agriscience I (1 Credit) | 010913 | 1 | ~ | v |
| Introduction to Manufacturing C4M in Agriscience I (2 Credits) | 010914 | 2 | ~ | v |
| Introduction to Manufacturing C4M in Agriscience I (3 Credits) | 010915 | 3 | ~ | v |
| Manufacturing Tools and Equipment C4M in Agriscience (1 Credit) | 010916 | 1 | ~ | v |
| Manufacturing Tools and Equipment C4M in Agriscience (2 Credits) | 010917 | 2 | ~ | v |
| Manufacturing Tools and Equipment C4M in Agriscience (3 Credits) | 010918 | 3 | ~ | v |
| Automation in Manufacturing C4M in Agriscience (1 Credit) | 010919 | 1 | ~ | v |
| Automation in Manufacturing C4M in Agriscience (2 Credits) | 010920 | 2 | ~ | v |
| Automation in Manufacturing C4M in Agriscience (3 Credits) | 010921 | 3 | ~ | v |
| Introduction to Fabrication, P-Tech, and Machining C4M in Agriscience (1 Credit) | 010922 | 1 | ~ | V |

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| Introduction to Fabrication, P-Tech, and Machining C4M in Agriscience (2 Credits) | 010923 | 2 | · | V |
|-----------------------------------------------------------------------------------|--------|---|-------------|-------------|
| Introduction to Fabrication, P-Tech, and Machining C4M in Agriscience (3 Credits) | 010924 | 3 | ~ | V |
| Fundamentals of Machining C4Machining in Agriscience (1 Credit) | 010925 | 1 | ~ | V |
| Fundamentals of Machining C4Machining in Agriscience (2 Credits) | 010926 | 2 | ~ | > |
| Fundamentals of Machining C4Machining in Agriscience (3 Credits) | 010927 | 3 | ~ | ~ |
| Machining Tools and Equipment C4Machining in Agriscience (1 Credit) | 010928 | 1 | ~ | V |
| Machining Tools and Equipment C4Machining in Agriscience (2 Credits) | 010929 | 2 | ~ | V |
| Machining Tools and Equipment C4Machining in Agriscience (3 Credits) | 010930 | 3 | ~ | V |
| Manual Machining C4Machining in Agriscience (1 Credit) | 010931 | 1 | ~ | V |
| Manual Machining C4Machining in Agriscience (2 Credits) | 010932 | 2 | V | V |
| Manual Machining C4Machining in Agriscience (3 Credits) | 010933 | 3 | ~ | V |
| Computerized Numerical Control (CNC) Machining C4Machining in Agriscience (1 cr) | 010934 | 1 | V | V |
| Computerized Numerical Control (CNC) Machining C4Machining in Agriscience (2 cr) | 010935 | 2 | ~ | V |
| Computerized Numerical Control (CNC) Machining C4Machining in Agriscience (3 cr) | 010936 | 3 | V | V |
| THEATRE DESIGN AND TECHNOLOGY | 030702 | 1 | | |
| ACCOUNTING I | 040101 | 1 | > | V |
| ACCOUNTING II | 040104 | 1 | ~ | ~ |

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| ENTREPRENEURSHIP (BUSINESS) | 040110 | 1 | ~ | |
|------------------------------------------------|--------|-----|---|--|
| WORD PROCESSING | 040203 | 1 | ~ | |
| COOPERATIVE OFFICE EDUCATION (3 CREDITS) | 040205 | 3 | ~ | |
| COMPUTER TECHNOLOGY LITERACY | 040220 | 1 | ~ | |
| KEYBOARDING (1/2 CREDIT) | 040225 | 1/2 | ~ | |
| KEYBOARDING APPLICATIONS (1/2 CREDIT) | 040226 | 1/2 | ~ | |
| Keyboarding | 040229 | 1 | ~ | |
| BUSINESS LAW | 040303 | 1 | ~ | |
| BUSINESS COMMUNICATIONS | 040305 | 1 | ~ | |
| PRINCIPLES OF BUSINESS | 040306 | 1 | ~ | |
| Business Math | 040307 | 1 | ~ | |
| BUSINESS COMPUTER APPLICATIONS | 040400 | 1 | ~ | |
| INTRODUCTION TO BUSINESS COMPUTER APPLICATIONS | 040401 | 1 | ~ | |
| CUSTOMER SERVICE (1 CREDIT) | 041001 | 1 | ~ | |
| COOPERATIVE MARKETING EDUCATION I (3 CREDITS) | 041010 | 3 | ~ | |
| COOPERATIVE MARKETING EDUCATION II (3 CREDITS) | 041011 | 3 | ~ | |
| PERSONAL FINANCE | 041022 | 1 | ~ | |
| PRINCIPLES OF MARKETING I | 041025 | 1 | ~ | |

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| PRINCIPLES OF MARKETING II | 041026 | 1 | ~ | |
|-------------------------------------------------------------|--------|---|---|---|
| ENTREPRENEURSHIP (MARKETING) | 041040 | 1 | ~ | |
| ENTREPRENEURSHIP II - Advanced Micro-Enterprise Credentials | 041041 | 1 | ~ | ~ |
| JOBS FOR AMERICA'S GRADUATES 1 | 042010 | 1 | ~ | ~ |
| JOBS FOR AMERICA'S GRADUATES 2 | 042020 | 1 | V | ~ |
| JOBS FOR AMERICA'S GRADUATES 3 | 042030 | 1 | V | ~ |
| JOBS FOR AMERICA'S GRADUATES 4 | 042040 | 1 | ~ | ~ |
| SPEECH I | 051101 | 1 | | |
| SPEECH II | 051102 | 1 | | |
| ENGINEERING DESIGN I (1 CREDIT) | 080110 | 1 | ~ | |
| Engineering Design I (2 Credits) | 080111 | 2 | ~ | |
| Engineering Design I (3 Credits) | 080112 | 3 | ~ | |
| ENGINEERING DESIGN II (1 CREDIT) | 080120 | 1 | ~ | |
| Engineering Design II (2 Credits) | 080121 | 2 | V | |
| Engineering Design II (3 Credits) | 080122 | 3 | V | |
| CDF-Qualifying CTE Internship I (2 CREDITS) | 080200 | 2 | V | V |
| CDF-Qualifying CTE Internship II (2 CREDITS) | 080201 | 2 | V | V |
| CDF-Qualifying CTE Internship I (1 CREDIT) | 080202 | 1 | ~ | ~ |

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| CDF-Qualifying CTE Internship II (1 CREDIT) | 080203 | 1 | v | ~ |
|---------------------------------------------------|--------|-----|----------|----------|
| Virtual Workplace Experience I (1/2 credit) | 080204 | 1/2 | ~ | |
| Virtual Workplace Experience I (1 credit) | 080205 | 1 | ~ | |
| Virtual Workplace Experience II (1/2 credit) | 080206 | 1/2 | ~ | |
| Virtual Workplace Experience II (1 credit) | 080207 | 1 | ~ | |
| Pre-Apprenticeship I (2 Credits) | 080208 | 2 | ~ | |
| Pre-Apprenticeship II (2 Credits) | 080209 | 2 | ~ | |
| Pre-Apprenticeship I (1 Credit) | 080210 | 1 | ~ | |
| Pre-Apprenticeship II (1 Credit) | 080211 | 1 | ~ | |
| Authentic Workplace Experience I (1 Credit) | 080212 | 1 | ~ | |
| CDF-QUALIFYING PRE-APPRENTICESHIP I (1 CREDIT) | 080230 | 1 | ~ | v |
| CDF-QUALIFYING PRE-APPRENTICESHIP I (2 CREDITS) | 080231 | 2 | ~ | v |
| CDF-QUALIFYING PRE-APPRENTICESHIP II (1 CREDIT) | 080233 | 1 | ~ | V |
| CDF-QUALIFYING PRE-APPRENTICESHIP II (2 CREDITS) | 080234 | 2 | ~ | v |
| CDF-QUALIFYING PRE-APPRENTICESHIP III (1 CREDIT) | 080236 | 1 | ~ | ~ |
| CDF-QUALIFYING PRE-APPRENTICESHIP III (2 CREDITS) | 080237 | 2 | ~ | ~ |
| CDF-QUALIFYING PRE-APPRENTICESHIP IV (1 CREDIT) | 080239 | 1 | ~ | ~ |
| CDF-QUALIFYING PRE-APPRENTICESHIP IV (2 CREDITS) | 080240 | 2 | ~ | ~ |

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| GENERAL COOPERATIVE EDUCATION I (3 CREDITS) | 080300 | 3 | ~ | |
|----------------------------------------------|--------|-----|-------------|--|
| GENERAL COOPERATIVE EDUCATION II (3 CREDITS) | 080301 | 3 | > | |
| EDUCATION FOR CAREERS (1/2 CREDIT) | 080400 | 1/2 | ~ | |
| EDUCATION FOR CAREERS (1CREDIT) | 080401 | 1 | ~ | |
| JOURNEY TO CAREERS PART I (1/2 CREDIT) | 080402 | 1/2 | ~ | |
| JOURNEY TO CAREERS (1 CREDIT) | 080403 | 1 | ~ | |
| JOURNEY TO CAREERS PART II (1/2 CREDIT) | 080404 | 1/2 | ~ | |
| EDUCATION FOR CAREERS PART I (1/2 CREDIT) | 080405 | 1/2 | ~ | |
| EDUCATION FOR CAREERS PART II (1/2 CREDIT) | 080406 | 1/2 | ~ | |
| Career Success Skills | 080407 | 1 | ~ | |
| Basic/Initial Career Readiness | 080409 | 1 | ~ | |
| Advanced Career Readiness | 080410 | 1 | ~ | |
| ETHICS IN BUSINESS (1/2 CREDIT) | 080640 | 1/2 | ~ | |
| INSURANCE (1/2 CREDIT) | 080650 | 1/2 | ~ | |
| BUSINESS IN A GLOBAL ECONOMY (1/2 CREDIT) | 080660 | 1/2 | ~ | |
| PRINCIPLES OF FINANCE (1/2 CREDIT) | 080670 | 1/2 | ~ | |
| (NAF) ENTREPRENEURSHIP (1/2 CREDIT) | 080685 | 1/2 | ~ | |
| MANAGERIAL ACCOUNTING (1/2 CREDIT) | 080691 | 1/2 | ~ | |

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| CUSTOMER SERVICE (1/2 CREDIT) | 080720 | 1/2 | ~ | |
|------------------------------------------------------------|--------|-----|---|---|
| ASSISTIVE TECHNOLOGY FOR THE VISUALLY IMPAIRED (1 CREDIT) | 080900 | 1 | ~ | |
| BUSINESS ENTERPRISES FOR THE VISUALLY IMPAIRED (1 CREDIT) | 080901 | 1 | ~ | |
| BRAILLE I (1 CREDIT) | 080902 | 1 | ~ | |
| BRAILLE II (1 CREDIT) | 080903 | 1 | ~ | |
| COOPERATIVE HEALTH OCCUPATIONS (3 CREDITS) | 090004 | 3 | ~ | |
| FIRST RESPONDER / EMERGENCY MEDICAL RESPONDER (1/2 CREDIT) | 090710 | 1/2 | ~ | |
| FIRST RESPONDER / EMERGENCY MEDICAL RESPONDER (1 CREDIT) | 090711 | 1 | ~ | |
| FIRST RESPONDER / EMERGENCY MEDICAL RESPONDER (2 CREDITS) | 090712 | 2 | ~ | |
| COOPERATIVE FAMILY AND CONSUMER SCIENCES (3 CREDITS) | 100800 | 3 | ~ | |
| MATERIALS AND PROCESSES | 110005 | 1 | ~ | |
| GENERAL TECHNOLOGY EDUCATION | 110010 | 1 | ~ | |
| MARINE ENGINEERING (1 CREDIT) | 110020 | 1 | ~ | |
| COOPERATIVE TECHNOLOGY EDUCATION (3 CREDITS) | 110098 | 3 | ~ | |
| BASIC WOOD TECHNOLOGY | 110100 | 1 | ~ | |
| NCCER CONSTRUCTION TECHNOLOGY | 110110 | 1 | ~ | ~ |
| ADVANCED WOOD TECHNOLOGY | 110120 | 1 | ~ | |
| BASIC METAL TECHNOLOGY I | 110200 | 1 | ~ | |

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| WELDING TECHNOLOGY | 110230 | 1 | ~ | |
|-------------------------------------------------------------------|--------|---|---|-------------|
| Grinder Assistant | 110231 | 1 | ~ | |
| Rod Identifier/Runner | 110232 | 1 | ~ | |
| ADVANCED METAL TECHNOLOGY | 110240 | 1 | ~ | |
| MANUFACTURING TECHNOLOGY | 110250 | 1 | ~ | |
| INTRODUCTION TO MANUFACTURING C4M | 110256 | 1 | ~ | V |
| MANUFACTURING TOOLS AND EQUIPMENT C4M (1 CREDIT) | 110257 | 1 | ~ | V |
| AUTOMATION IN MANUFACTURING C4M (1 CREDIT) | 110258 | 1 | ~ | V |
| INTRODUCTION TO FABRICATION, P-TECH AND MACHINING C4M (1 CREDIT) | 110259 | 1 | V | V |
| INTRODUCTION TO MANUFACTURING C4M (2 CREDITS) | 110260 | 2 | ~ | > |
| INTRODUCTION TO MANUFACTURING C4M (3 CREDITS) | 110261 | 3 | ~ | > |
| MANUFACTURING TOOLS AND EQUIPMENT C4M (2 CREDITS) | 110262 | 2 | ~ | > |
| MANUFACTURING TOOLS AND EQUIPMENT C4M (3 CREDITS) | 110263 | 3 | ~ | ~ |
| AUTOMATION IN MANUFACTURING C4M (2 CREDITS) | 110264 | 2 | ~ | V |
| AUTOMATION IN MANUFACTURING C4M (3 CREDITS) | 110265 | 3 | ~ | V |
| INTRODUCTION TO FABRICATION, P-TECH AND MACHINING C4M (2 CREDITS) | 110266 | 2 | ~ | V |
| INTRODUCTION TO FABRICATION, P-TECH AND MACHINING C4M (3 CREDITS) | 110267 | 3 | V | ~ |

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| FUNDAMENTALS OF MACHINING C4MACHINING (1 CREDIT) | 110268 | 1 | ~ | V |
|-------------------------------------------------------------------|--------|-----|---|----------|
| FUNDAMENTALS OF MACHINING C4MACHINING (2 CREDITS) | 110269 | 2 | V | V |
| FUNDAMENTALS OF MACHINING C4MACHINING (3 CREDITS) | 110270 | 3 | ~ | V |
| MACHINING TOOLS AND EQUIPMENT C4MACHINING (1 CREDIT) | 110271 | 1 | ~ | V |
| MACHINING TOOLS AND EQUIPMENT C4MACHINING (2 CREDITS) | 110272 | 2 | ~ | ' |
| MACHINING TOOLS AND EQUIPMENT C4MACHINING (3 CREDITS) | 110273 | 3 | ~ | V |
| MANUAL MACHINING C4MACHINING (1 CREDIT) | 110274 | 1 | ~ | V |
| MANUAL MACHINING C4MACHINING (2 CREDITS) | 110275 | 2 | ~ | V |
| MANUAL MACHINING C4MACHINING (3 CREDITS) | 110276 | 3 | V | ~ |
| COMPUTERIZED NUMERICAL CONTROL (CNC) MACHINING C4MACHINING (1 CR) | 110277 | 1 | V | V |
| COMPUTERIZED NUMERICAL CONTROL (CNC) MACHINING C4MACHINING (2 CR) | 110278 | 2 | V | V |
| COMPUTERIZED NUMERICAL CONTROL (CNC) MACHINING C4MACHINING (3 CR) | 110279 | 3 | ~ | V |
| TECHNOLOGY EDUCATION ELECTIVE II (1/2 CREDIT) | 110299 | 1/2 | ~ | |
| ENERGY, POWER AND TRANSPORTATION TECHNOLOGY | 110310 | 1 | V | |
| POWER MECHANICS | 110330 | 1 | V | |
| Fluid Mechanics | 110331 | 1 | V | |
| TECHNOLOGY EDUCATION ELECTIVE II (1 CREDIT) | 110399 | 1 | ~ | |

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| TECHNOLOGY EDUCATION ELECTIVE II (2 CREDITS) | 110400 | 2 | ~ | |
|----------------------------------------------|--------|---|---|----------|
| TECHNOLOGY EDUCATION ELECTIVE II (3 CREDITS) | 110401 | 3 | ~ | |
| CTE Internship I (1 credit; Non-CDF) | 110402 | 1 | ~ | |
| CTE Internship I (2 credits; Non-CDF) | 110403 | 2 | ~ | |
| CTE Internship II (1 credit; Non-CDF) | 110404 | 1 | ~ | |
| CTE Internship II (2 credits; Non-CDF) | 110405 | 2 | ~ | |
| COMMUNICATION TECHNOLOGY | 110540 | 1 | ~ | |
| BASIC TECHNICAL DRAFTING | 110560 | 1 | ~ | |
| CMAD Drafting | 110570 | 1 | ~ | ~ |
| CMAD Drafting (2 credit) | 110571 | 2 | ~ | ~ |
| CMAD Drafting (3 credit) | 110572 | 3 | ~ | ~ |
| ARCHITECTURAL DRAFTING | 110580 | 1 | ~ | |
| ADVANCED TECHNICAL DRAFTING | 110590 | 1 | ~ | |
| BASIC ELECTRICITY/ELECTRONICS | 110600 | 1 | ~ | |
| ADVANCED ELECTRICITY/ELECTRONICS | 110610 | 1 | ~ | |
| NCCER Carpentry III (1 credit) | 110700 | 1 | ~ | V |
| NCCER CARPENTRY I (1 CREDIT) | 110701 | 1 | ~ | V |
| NCCER CARPENTRY I (2 CREDITS) | 110702 | 2 | ~ | ~ |

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| NCCER CARPENTRY I (3 CREDITS) | 110703 | 3 | ~ | V |
| NCCER Carpentry III (2 credits) | 110704 | 2 | ~ | > |
| NCCER Carpentry III (3 credits) | 110705 | 3 | ~ | V |
| NCCER CARPENTRY II (1 CREDIT) | 110706 | 1 | ~ | V |
| NCCER CARPENTRY II (2 CREDITS) | 110707 | 2 | ~ | V |
| NCCER CARPENTRY II (3 CREDITS) | 110708 | 3 | ~ | V |
| NCCER Carpentry IV (1 credit) | 110709 | 1 | ~ | V |
| NCCER Carpentry IV (2 credits) | 110710 | 2 | ~ | V |
| NCCER ELECTRICAL I (1 CREDIT) | 110711 | 1 | ~ | ~ |
| NCCER ELECTRICAL I (2 CREDITS) | 110712 | 2 | ~ | V |
| NCCER ELECTRICAL I (3 CREDITS) | 110713 | 3 | ~ | V |
| NCCER Carpentry IV (3 credits) | 110714 | 3 | ~ | V |
| NCCER ELECTRICAL II (1 CREDIT) | 110716 | 1 | ~ | ' |
| NCCER ELECTRICAL II (2 CREDITS) | 110717 | 2 | ~ | V |
| NCCER ELECTRICAL II (3 CREDITS) | 110718 | 3 | V | V |
| NCCER INSTRUMENTATION CONTROL MECHANIC I (1 CREDIT) | 110721 | 1 | V | V |
| NCCER INSTRUMENTATION CONTROL MECHANIC I (2 CREDITS) | 110722 | 2 | V | V |
| NCCER INSTRUMENTATION CONTROL MECHANIC I (3 CREDITS) | 110723 | 3 | ~ | V |

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| NCCER INSTRUMENTATION CONTROL MECHANIC II (1 CREDIT) | 110726 | 1 | ~ | V |
|-------------------------------------------------------|--------|-----|---|----------|
| NCCER INSTRUMENTATION CONTROL MECHANIC II (2 CREDITS) | 110727 | 2 | ~ | ~ |
| NCCER INSTRUMENTATION CONTROL MECHANIC II (3 CREDITS) | 110728 | 3 | ~ | V |
| NCCER PIPEFITTER I (1 CREDIT) | 110731 | 1 | ~ | ~ |
| NCCER PIPEFITTER I (2 CREDITS) | 110732 | 2 | ~ | ~ |
| NCCER PIPEFITTER I (3 CREDITS) | 110733 | 3 | ~ | ~ |
| NCCER PIPEFITTER II (1 CREDIT) | 110736 | 1 | ~ | V |
| NCCER PIPEFITTER II (2 CREDITS) | 110737 | 2 | ~ | V |
| NCCER PIPEFITTER II (3 CREDITS) | 110738 | 3 | ~ | V |
| NCCER WELDING TECHNOLOGY I (1 CREDIT) | 110741 | 1 | ~ | V |
| NCCER WELDING TECHNOLOGY I (2 CREDITS) | 110742 | 2 | ~ | V |
| NCCER WELDING TECHNOLOGY I (3 CREDITS) | 110743 | 3 | ~ | V |
| NCCER WELDING TECHNOLOGY II (1 CREDIT) | 110746 | 1 | ~ | V |
| NCCER WELDING TECHNOLOGY II (2 CREDITS) | 110747 | 2 | ~ | V |
| NCCER WELDING TECHNOLOGY II (3 CREDITS) | 110748 | 3 | ~ | V |
| INTRODUCTION TO ENGINEERING DESIGN I (1/2 CREDIT) | 110799 | 1/2 | ~ | |
| INTRODUCTION TO ENGINEERING DESIGN (1 CREDIT) | 110800 | 1 | ~ | |
| PRINCIPLES OF ENGINEERING (1 CREDIT) | 110810 | 1 | ~ | |

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| PRINCIPLES OF ENGINEERING (2 CREDITS) | 110811 | 2 | ~ | |
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| DIGITAL ELECTRONICS (1 CREDIT) | 110820 | 1 | ~ | |
| AEROSPACE ENGINEERING (1 CREDIT) | 110830 | 1 | ~ | |
| CIVIL ENGINEERING & ARCHITECTURE (1 CREDIT) | 110840 | 1 | ~ | |
| COMPUTER INTEGRATED MANUFACTURING (1 CREDIT) | 110850 | 1 | ~ | |
| ENGINEERING DESIGN AND DEVELOPMENT (1 CREDIT) | 110860 | 1 | ~ | |
| PHYSICS OF TECHNOLOGY I (VOCATIONAL) | 110900 | 1 | ~ | |
| PHYSICS OF TECHNOLOGY II (VOCATIONAL) | 110910 | 1 | V | |
| PROCESS TECHNICIAN I (1 credit) | 110911 | 1 | V | ~ |
| PROCESS TECHNICIAN II (1 credit) | 110912 | 1 | ~ | ~ |
| Process Technician I (2 credits) | 110913 | 2 | ~ | ~ |
| Process Technician I (3 credits) | 110914 | 3 | ~ | ~ |
| Process Instrumentation I | 110915 | 1 | V | |
| Process Instrumentation II | 110916 | 1 | V | |
| Process Technician II (2 credits) | 110917 | 2 | V | ~ |
| Process Technician II (3 credits) | 110918 | 3 | v | ~ |
| Process Technician III (1 credit) | 110919 | 1 | v | ~ |
| Process Technician III (2 credits) | 110920 | 2 | V | ~ |

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| Process Technician III (3 credits) | 110921 | 3 | ~ | ~ |
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| Process Technology I: Equipment | 110922 | 1 | ~ | |
| Process Technology II: Unit Systems | 110923 | 1 | ~ | |
| Process Technology III: Operations | 110924 | 1 | ~ | |
| OIL AND GAS PRODUCTION OPERATIONS (1 CREDIT) | 110955 | 1 | ~ | ~ |
| T2 SAFETY SYSTEMS FOR OIL AND GAS PRODUCTION (1 CREDIT) | 110956 | 1 | ~ | V |
| OIL PATCH PREPARATION SYSTEM | 110957 | 1 | ~ | V |
| TECHNICAL WRITING | 120350 | 1 | | |
| AMERICAN SIGN LANGUAGE I | 123456 | 1 | | |
| AMERICAN SIGN LANGUAGE II | 123457 | 1 | | |
| TECHNICAL READING and WRITING | 125010 | 1 | | |
| BUSINESS COMMUNICATIONS | 125030 | 1 | | |
| ENVIRONMENTAL SCIENCE | 150310 | 1 | | |
| CHEMISTRY | 150401 | 1 | | |
| FIRST ROBOTICS I (1 CREDIT) | 150740 | 1 | | |
| FIRST ROBOTICS II (1 CREDIT) | 150750 | 1 | | |
| FIRST ROBOTICS III (1 CREDIT) | 150760 | 1 | | |
| FIRST ROBOTICS IV (1 CREDIT) | 150770 | 1 | | |
| GEOMETRY | 160323 | 1 | | |
| FINANCIAL LITERACY (formerly Financial Math) | 160345 | 1 | | |
| TECHNICAL MATH | 165010 | 1 | | |

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|------------------------------------------------|------------------|---------------------------|-----|------------|
| AUTO BODY REPAIR II (1 CREDIT) | 310205 | 1 | ~ | ~ |
| AUTO BODY REPAIR I (3 CREDITS) | 310203 | 3 | • | ~ |
| AUTO BODY REPAIR I (2 CREDITS) | 310202 | 2 | • | ~ |
| AUTO BODY REPAIR I (1 CREDIT) | 310200 | 1 | • | ~ |
| AIR CONDITIONING/REFRIGERATION IV (3 CREDITS) | 310119 | 3 | • | ~ |
| AIR CONDITIONING/REFRIGERATION IV (2 CREDITS) | 310118 | 2 | • | ~ |
| AIR CONDITIONING/REFRIGERATION IV (1 CREDIT) | 310117 | 1 | • | ~ |
| AIR CONDITIONING/REFRIGERATION III (3 CREDITS) | 310116 | 3 | • | ~ |
| AIR CONDITIONING/REFRIGERATION III (3 CREDITS) | 310115 | 2 | • | ~ |
| AIR CONDITIONING/REFRIGERATION III (1 CREDIT) | 310114 | 1 | • | ~ |
| AIR CONDITIONING/REFRIGERATION II (3 CREDITS) | 310113 | 3 | • | ~ |
| AIR CONDITIONING/REFRIGERATION II (2 CREDITS) | 310112 | 2 | • | ~ |
| AIR CONDITIONING/REFRIGERATION II (1 CREDIT) | 310105 | 1 | • | • |
| AIR CONDITIONING/REFRIGERATION I (3 CREDITS) | 310103 | 3 | • | ~ |
| AIR CONDITIONING/REFRIGERATION I (2 CREDITS) | 310102 | 2 | • | ~ |
| AIR CONDITIONING/REFRIGERATION I (1 CREDIT) | 310100 | 1 | • | • |
| LAW STUDIES | 220506 | 1 | | |
| JR. ROTC IV | 170004 | 1 | | |
| JR. ROTC III | 170003 | 1 | | |

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| Pathway |
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| AUTO BODY REPAIR II (2 CREDITS) | 310212 | 2 | ~ | ~ |
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| AUTO BODY REPAIR II (3 CREDITS) | 310213 | 3 | ~ | v |
| Auto Body Repair III (1 credit) | 310214 | 1 | ~ | v |
| Auto Body Repair III (2 credits) | 310215 | 2 | ~ | v |
| Auto Body Repair III (3 credits) | 310216 | 3 | ~ | ~ |
| Auto Body Repair IV (1 credit) | 310217 | 1 | ~ | > |
| Auto Body Repair IV (2 credits) | 310218 | 2 | ~ | ~ |
| Auto Body Repair IV (3 credits) | 310219 | 3 | ~ | ' |
| AUTOMOTIVE TECHNICIAN I (1 CREDIT) | 310300 | 1 | ~ | ~ |
| GENERAL AUTOMOTIVE MAINTENANCE (2 CREDITS) | 310302 | 2 | ~ | |
| GENERAL AUTOMOTIVE MAINTENANCE (3 CREDITS) | 310303 | 3 | ~ | |
| AUTOMOTIVE TECHNICIAN II (1 CREDIT) | 310305 | 1 | ~ | / |
| AUTOMOTIVE TECHNICIAN III (1 CREDIT) | 310306 | 1 | ~ | v |
| AUTOMOTIVE TECHNICIAN IV (1 CREDIT) | 310307 | 1 | ~ | ~ |
| AUTOMOTIVE TECHNICIAN V (1 CREDIT) | 310308 | 1 | ~ | ~ |
| AUTOMOTIVE TECHNICIAN VI (1 CREDIT) | 310309 | 1 | ~ | V |
| AUTOMOTIVE TECHNICIAN I (2 CREDITS) | 310312 | 2 | ~ | V |
| AUTOMOTIVE TECHNICIAN I (3 CREDITS) | 310313 | 3 | ~ | ~ |

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| GENERAL AUTOMOTIVE MAINTENANCE (1 CREDIT) | 310315 | 1 | ~ | |
|---------------------------------------------------------|--------|---|---|-------------|
| AUTOMOTIVE TECHNICIAN II (2 CREDITS) | 310322 | 2 | ~ | > |
| AUTOMOTIVE TECHNICIAN II (3 CREDITS) | 310323 | 3 | ~ | ~ |
| AUTOMOTIVE TECHNICIAN III (2 CREDITS) | 310332 | 2 | ~ | V |
| AUTOMOTIVE TECHNICIAN III (3 CREDITS) | 310333 | 3 | ~ | > |
| AUTOMOTIVE TECHNICIAN IV (2 CREDITS) | 310342 | 2 | ~ | > |
| AUTOMOTIVE TECHNICIAN IV (3 CREDITS) | 310343 | 3 | ~ | V |
| AUTOMOTIVE TECHNICIAN V (2 CREDITS) | 310352 | 2 | ~ | V |
| AUTOMOTIVE TECHNICIAN V (3 CREDITS) | 310353 | 3 | ~ | ~ |
| AUTOMOTIVE TECHNICIAN VI (2 CREDITS) | 310362 | 2 | ~ | V |
| AUTOMOTIVE TECHNICIAN VI (3 CREDITS) | 310363 | 3 | ~ | V |
| Introduction to Motor Vehicle Technology | 310373 | 1 | ~ | |
| Steering and Suspension Systems | 310381 | 1 | ~ | |
| Steering and Suspension Systems Laboratory | 310382 | 1 | ~ | |
| Advanced Electrical Electronics | 310383 | 1 | ~ | |
| Advanced Electrical and Electronics Laboratory | 310384 | 1 | ~ | |
| Engine Performance I: Components and Systems | 310390 | 1 | ~ | |
| Engine Performance I: Components and Systems Laboratory | 310391 | 1 | ~ | |

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| Engine Diagnosis and Repair | 310392 | 1 | ~ | |
|----------------------------------------------|--------|---|---|--|
| Engine Diagnosis and Repair Laboratory | 310393 | 1 | ~ | |
| Engine Performance II: Advanced Driveability | 310394 | 1 | ~ | |
| Engine Performance II Laboratory | 310395 | 1 | ~ | |
| BASIC ELECTRICITY I (1 CREDIT) | 310400 | 1 | ~ | |
| BASIC ELECTRICITY I (2 CREDITS) | 310402 | 2 | ~ | |
| BASIC ELECTRICITY I (3 CREDITS) | 310403 | 3 | ~ | |
| BASIC ELECTRICITY II (1 CREDIT) | 310410 | 1 | ~ | |
| BASIC ELECTRICITY II (2 CREDITS) | 310412 | 2 | ~ | |
| BASIC ELECTRICITY II (3 CREDITS) | 310413 | 3 | ~ | |
| CABINET MAKING I (1 CREDIT) | 310500 | 1 | ~ | |
| CABINET MAKING I (2 CREDITS) | 310502 | 2 | ~ | |
| CABINET MAKING I (3 CREDITS) | 310503 | 3 | V | |
| CABINET MAKING II (1 CREDIT) | 310505 | 1 | ~ | |
| CABINET MAKING II (2 CREDITS) | 310512 | 2 | V | |
| CABINET MAKING II (3 CREDITS) | 310513 | 3 | V | |
| CARPENTRY I (1 CREDIT) | 310600 | 1 | V | |
| CARPENTRY I (2 CREDITS) | 310602 | 2 | ~ | |

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| CARPENTRY I (3 CREDITS) | 310603 | 3 | ~ | |
|----------------------------------------------------|--------|---|---|--|
| CARPENTRY II (1 CREDIT) | 310605 | 1 | ~ | |
| CARPENTRY II (2 CREDITS) | 310612 | 2 | ~ | |
| CARPENTRY II (3 CREDITS) | 310613 | 3 | ~ | |
| Building Materials and Estimating | 310620 | 1 | ~ | |
| Carpentry Calculations | 310621 | 1 | ~ | |
| Design, Blueprint Reading and Codes | 310622 | 1 | ~ | |
| Site Layout | 310623 | 1 | ~ | |
| Foundations and Floor Framing | 310624 | 1 | ~ | |
| Wall and Ceiling Framing | 310625 | 1 | ~ | |
| Roofing Construction | 310626 | 1 | ~ | |
| Exterior Finishes | 310627 | 1 | ~ | |
| Interior Finishes | 310628 | 1 | ~ | |
| Project Management | 310630 | 1 | ~ | |
| Fundamentals of Industrial Scaffolding (1 Credit) | 310631 | 1 | ~ | |
| Fundamentals of Industrial Scaffolding (2 Credits) | 310632 | 2 | ~ | |
| COMPUTER ELECTRONICS I (1 CREDIT) | 310800 | 1 | ~ | |
| COMPUTER ELECTRONICS I (2 CREDITS) | 310802 | 2 | ~ | |

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| COMPUTER ELECTRONICS I (3 CREDITS) | 310803 | 3 | ~ | |
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| COMPUTER ELECTRONICS II (1 CREDIT) | 310805 | 1 | ~ | |
| COMPUTER ELECTRONICS II (2 CREDITS) | 310812 | 2 | ~ | |
| COMPUTER ELECTRONICS II (3 CREDITS) | 310813 | 3 | ~ | |
| Computer Service Technology I | 310818 | 1 | ~ | |
| Computer Service Technology II | 310819 | 1 | ~ | |
| COMPUTER SERVICE TECHNOLOGY I (2 CREDITS) | 310820 | 2 | ~ | |
| COMPUTER SERVICE TECHNOLOGY I (3 CREDITS) | 310821 | 3 | ~ | |
| COMPUTER SERVICE TECHNOLOGY II (2 CREDITS) | 310822 | 2 | ~ | |
| COMPUTER SERVICE TECHNOLOGY II (3 CREDITS) | 310823 | 3 | ~ | |
| NETWORKING BASICS (2 CREDITS) | 310850 | 2 | ~ | |
| NETWORKING BASICS (3 CREDITS) | 310851 | 3 | ~ | |
| ROUTERS AND ROUTING BASICS (2 CREDITS) | 310852 | 2 | ~ | |
| ROUTERS AND ROUTING BASICS (3 CREDITS) | 310853 | 3 | ~ | |
| DIESEL MECHANICS I (1 CREDIT) | 311200 | 1 | ~ | |
| DIESEL MECHANICS I (2 CREDITS) | 311202 | 2 | ~ | |
| DIESEL MECHANICS I (3 CREDITS) | 311203 | 3 | ~ | |
| DIESEL MECHANICS II (1 CREDIT) | 311205 | 1 | ~ | |

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| DIESEL MECHANICS II (2 CREDITS) | 311212 | 2 | ~ | |
|---------------------------------------------|--------|---|---|--|
| DIESEL MECHANICS II (3 CREDITS) | 311213 | 3 | ~ | |
| DRAFTING & DESIGN TECHNOLOGY I (1 CREDIT) | 311300 | 1 | ~ | |
| DRAFTING & DESIGN TECHNOLOGY I (2 CREDITS) | 311302 | 2 | ~ | |
| DRAFTING & DESIGN TECHNOLOGY I (3 CREDITS) | 311303 | 3 | ~ | |
| DRAFTING & DESIGN TECHNOLOGY II (1 CREDIT) | 311305 | 1 | ~ | |
| DRAFTING & DESIGN TECHNOLOGY II (2 CREDITS) | 311312 | 2 | ~ | |
| DRAFTING & DESIGN TECHNOLOGY II (3 CREDITS) | 311313 | 3 | ~ | |
| ELECTRICIAN I (1 CREDIT) | 311400 | 1 | ~ | |
| ELECTRICIAN I (2 CREDITS) | 311402 | 2 | ~ | |
| ELECTRICIAN I (3 CREDITS) | 311403 | 3 | ~ | |
| ELECTRICIAN II (1 CREDIT) | 311405 | 1 | ~ | |
| ELECTRICIAN II (2 CREDITS) | 311412 | 2 | ~ | |
| ELECTRICIAN II (3 CREDITS) | 311413 | 3 | ~ | |
| ELECTRONICS I (1 CREDIT) | 311500 | 1 | ~ | |
| ELECTRONICS I (2 CREDITS) | 311502 | 2 | ~ | |
| ELECTRONICS I (3 CREDITS) | 311503 | 3 | ~ | |
| ELECTRONICS II (1 CREDIT) | 311505 | 1 | ~ | |

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| ELECTRONICS II (2 CREDITS) | 311512 | 2 | ~ | |
|------------------------------------------|--------|---|---|----------|
| ELECTRONICS II (3 CREDITS) | 311513 | 3 | ~ | |
| NCCER Core | 311720 | 1 | ~ | ~ |
| INDUSTRIAL ELECTRONICS I (1 CREDIT) | 311800 | 1 | ~ | |
| INDUSTRIAL ELECTRONICS I (2 CREDITS) | 311802 | 2 | ~ | |
| INDUSTRIAL ELECTRONICS I (3 CREDITS) | 311803 | 3 | ~ | |
| INDUSTRIAL ELECTRONICS II (1 CREDIT) | 311805 | 1 | ~ | |
| INDUSTRIAL ELECTRONICS II (2 CREDITS) | 311812 | 2 | ~ | |
| INDUSTRIAL ELECTRONICS II (3 CREDITS) | 311813 | 3 | ~ | |
| INDUSTRIAL MACHINES SHOP I (1 CREDIT) | 311900 | 1 | ~ | ~ |
| INDUSTRIAL MACHINES SHOP I (2 CREDITS) | 311902 | 2 | ~ | ~ |
| INDUSTRIAL MACHINES SHOP I (3 CREDITS) | 311903 | 3 | ~ | V |
| INDUSTRIAL MACHINES SHOP II (1 CREDIT) | 311905 | 1 | V | V |
| INDUSTRIAL MACHINES SHOP II (2 CREDITS) | 311912 | 2 | ~ | V |
| INDUSTRIAL MACHINES SHOP II (3 CREDITS) | 311913 | 3 | V | V |
| GO SAFE | 311914 | 1 | V | |
| Industrial Machines Shop III (1 credit) | 311915 | 1 | V | v |
| Industrial Machines Shop III (2 credits) | 311916 | 2 | ~ | ~ |

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| Industrial Machines Shop III (3 credits) | 311917 | 3 | ~ | V |
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| Industrial Machines Shop IV (1 credit) | 311918 | 1 | ~ | V |
| Industrial Machines Shop IV (2 credits) | 311919 | 2 | ~ | V |
| Industrial Machines Shop IV (3 credits) | 311920 | 3 | ~ | V |
| Industrial and Plant Safety | 311921 | 1 | ~ | |
| Introduction to Hazardous Materials | 311922 | 1 | ~ | |
| Workplace Safety (1 Credit) | 311923 | 1 | ~ | |
| Workplace Safety (2 Credit) | 311924 | 2 | ~ | |
| OUTDOOR POWER EQUIPMENT TECHNICIAN I (1 CREDIT) | 312300 | 1 | ~ | |
| OUTDOOR POWER EQUIPMENT TECHNICIAN I (2 CREDITS) | 312302 | 2 | ~ | |
| OUTDOOR POWER EQUIPMENT TECHNICIAN I (3 CREDITS) | 312303 | 3 | ~ | |
| OUTDOOR POWER EQUIPMENT TECHNICIAN II (1 CREDIT) | 312305 | 1 | ~ | |
| OUTDOOR POWER EQUIPMENT TECHNICIAN II (2 CREDITS) | 312312 | 2 | ~ | |
| OUTDOOR POWER EQUIPMENT TECHNICIAN II (3 CREDITS) | 312313 | 3 | ~ | |
| OUTDOOR POWER EQUIPMENT TECHNICIAN III (1 CREDIT) | 312320 | 1 | ~ | |
| OUTDOOR POWER EQUIPMENT TECHNICIAN III (2 CREDITS) | 312321 | 2 | ~ | |
| OUTDOOR POWER EQUIPMENT TECHNICIAN III (3 CREDITS) | 312322 | 3 | ~ | |
| OUTDOOR POWER EQUIPMENT TECHNICIAN IV (1 CREDIT) | 312330 | 1 | ~ | |

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| OUTDOOR POWER EQUIPMENT TECHNICIAN IV (2 CREDITS) | 312331 | 2 | ~ | |
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| OUTDOOR POWER EQUIPMENT TECHNICIAN IV (3 CREDITS) | 312332 | 3 | ~ | |
| NCCER PLUMBING I (1 credit) | 312500 | 1 | ~ | ~ |
| NCCER PLUMBING I (2 credits) | 312502 | 2 | ~ | ~ |
| NCCER PLUMBING I (3 credits) | 312503 | 3 | ~ | v |
| NCCER PLUMBING II (1 credit) | 312505 | 1 | ~ | > |
| NCCER PLUMBING II (2 credits) | 312512 | 2 | ~ | v |
| NCCER PLUMBING II (3 credits) | 312513 | 3 | ~ | ~ |
| SHEET METAL I (1 CREDIT) | 312700 | 1 | ~ | |
| SHEET METAL I (2 CREDITS) | 312702 | 2 | ~ | |
| SHEET METAL I (3 CREDITS) | 312703 | 3 | ~ | |
| SHEET METAL II (1 CREDIT) | 312705 | 1 | ~ | |
| SHEET METAL II (2 CREDITS) | 312712 | 2 | ~ | |
| SHEET METAL II (3 CREDITS) | 312713 | 3 | ~ | |
| AWS WELDING I (1 credit) | 313100 | 1 | V | V |
| AWS WELDING I (2 credits) | 313102 | 2 | V | V |
| AWS WELDING I (3 credits) | 313103 | 3 | V | V |
| AWS WELDING II (1 credit) | 313105 | 1 | ~ | ~ |

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| AWS WELDING II (2 credits) | 313106 | 2 | ~ | > |
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| AWS WELDING II (3 credits) | 313107 | 3 | ~ | V |
| AWS Welding III (1 credit) | 313108 | 1 | ~ | V |
| AWS Welding III (2 credits) | 313109 | 2 | V | v |
| AWS Welding III (3 credits) | 313110 | 3 | V | v |
| AWS Welding IV (1 credit) | 313111 | 1 | V | ~ |
| AWS Welding IV (2 credits) | 313112 | 2 | V | ~ |
| AWS Welding IV (3 credits) | 313113 | 3 | V | ✓ |
| AWS WELDING I PART I (2 CREDITS) | 313114 | 2 | V | ~ |
| AWS WELDING I PART II (2 CREDITS) | 313115 | 2 | V | V |
| AWS WELDING II PART I (2 CREDITS) | 313116 | 2 | ~ | V |
| AWS WELDING II PART II (2 CREDITS) | 313117 | 2 | ~ | V |
| Basic SMAW | 313120 | 1 | V | |
| SMAW Groove Welds | 313121 | 1 | ~ | |
| SMAW Pipe 2G | 313122 | 1 | V | |
| SMAW Pipe 5G | 313123 | 1 | V | |
| SMAW Pipe 6G | 313124 | 1 | V | |
| G.M. TECHNICIAN I (1 CREDIT) | 313200 | 1 | ~ | |

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|---------------------------------|--------|---|---|----------|
| G.M. TECHNICIAN I (2 CREDITS) | 313202 | 2 | ~ | |
| G.M. TECHNICIAN I (3 CREDITS) | 313203 | 3 | ~ | |
| G.M. TECHNICIAN II (1 CREDIT) | 313205 | 1 | ~ | |
| G.M. TECHNICIAN II (2 CREDITS) | 313212 | 2 | ~ | |
| G.M. TECHNICIAN II (3 CREDITS) | 313213 | 3 | ~ | |
| NCCER CARPENTRY I (1 CREDIT) | 313300 | 1 | ~ | ' |
| NCCER CARPENTRY I (2 CREDITS) | 313302 | 2 | ~ | V |
| NCCER CARPENTRY I (3 CREDITS) | 313303 | 3 | ~ | V |
| NCCER CARPENTRY II (1 CREDIT) | 313305 | 1 | ~ | V |
| NCCER CARPENTRY II (2 CREDITS) | 313312 | 2 | ~ | V |
| NCCER CARPENTRY II (3 CREDITS) | 313313 | 3 | ~ | V |
| NCCER Carpentry III (3 credits) | 313317 | 3 | ~ | V |
| NCCER ELECTRICAL I (1 CREDIT) | 313400 | 1 | V | V |
| NCCER ELECTRICAL I (2 CREDITS) | 313402 | 2 | ~ | V |
| NCCER ELECTRICAL I (3 CREDITS) | 313403 | 3 | V | V |
| NCCER ELECTRICAL II (1 CREDIT) | 313405 | 1 | V | V |
| NCCER ELECTRICAL II (2 CREDITS) | 313412 | 2 | V | V |
| NCCER ELECTRICAL II (3 CREDITS) | 313413 | 3 | V | V |

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| NCCER Electrical III (1 Credit) | 313417 | 1 | ~ | V |
|-------------------------------------------------------|--------|---|---|----------|
| NCCER Electrical III (2 Credits) | 313418 | 2 | ~ | V |
| NCCER Electrical III (3 Credits) | 313419 | 3 | ~ | V |
| NCCER Electrical IV (1 Credit) | 313420 | 1 | ~ | V |
| NCCER Electrical IV (2 Credits) | 313421 | 2 | ~ | ✓ |
| NCCER Electrical IV (3 Credits) | 313422 | 3 | ~ | V |
| NCCER INSTRUMENTATION CONTROL MECHANIC I (1 CREDIT) | 313500 | 1 | ~ | V |
| NCCER INSTRUMENTATION CONTROL MECHANIC I (2 CREDITS) | 313502 | 2 | ~ | V |
| NCCER INSTRUMENTATION CONTROL MECHANIC I (3 CREDITS) | 313503 | 3 | ~ | v |
| NCCER INSTRUMENTATION CONTROL MECHANIC II (1 CREDIT) | 313505 | 1 | ~ | / |
| NCCER INSTRUMENTATION CONTROL MECHANIC II (2 CREDITS) | 313512 | 2 | ~ | ~ |
| NCCER INSTRUMENTATION CONTROL MECHANIC II (3 CREDITS) | 313513 | 3 | ~ | v |
| NCCER Instrumentation Control Mechanic III | 313517 | 1 | ~ | V |
| NCCER Instrumentation IV | 313520 | 1 | ~ | v |
| NCCER PIPEFITTER I (1 CREDIT) | 313600 | 1 | ~ | V |
| NCCER PIPEFITTER I (2 CREDITS) | 313602 | 2 | ~ | V |
| NCCER PIPEFITTER I (3 CREDITS) | 313603 | 3 | ~ | V |
| NCCER PIPEFITTER II (1 CREDIT) | 313605 | 1 | ~ | v |

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| OLD COURSE CODE | 313606 | 1 | ~ | ~ |
|------------------------------------------|--------|---|---|-------------|
| NCCER PIPEFITTER II (2 CREDITS) | 313612 | 2 | ~ | > |
| NCCER PIPEFITTER II (3 CREDITS) | 313613 | 3 | ~ | v |
| NCCER PIPEFITTER III (2 CREDITS) | 313616 | 2 | ~ | v |
| NCCER Pipefitting III | 313617 | 1 | ~ | ~ |
| NCCER PIPEFITTER IV (2 CREDITS) | 313619 | 2 | ~ | > |
| NCCER Pipefitting IV | 313620 | 1 | ~ | ~ |
| NCCER Welding Technology III (1 credit) | 313621 | 1 | ~ | ~ |
| NCCER Welding Technology III (2 credits) | 313622 | 2 | ~ | ~ |
| NCCER Welding Technology III (3 credits) | 313623 | 3 | ~ | > |
| NCCER Welding Technology IV (1 credit) | 313624 | 1 | ~ | ~ |
| NCCER Welding Technology IV (2 credits) | 313625 | 2 | ~ | ' |
| NCCER Welding Technology IV (3 credits) | 313626 | 3 | ~ | ~ |
| NCCER WELDING TECHNOLOGY I (1 CREDIT) | 313700 | 1 | ~ | ~ |
| NCCER WELDING TECHNOLOGY I (2 CREDITS) | 313702 | 2 | ~ | V |
| NCCER WELDING TECHNOLOGY I (3 CREDITS) | 313703 | 3 | ~ | V |
| NCCER WELDING TECHNOLOGY II (1 CREDIT) | 313705 | 1 | ~ | V |
| NCCER WELDING TECHNOLOGY II (2 CREDITS) | 313712 | 2 | ~ | ~ |

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| NCCER WELDING TECHNOLOGY II (3 CREDITS) | 313713 | 3 | ~ | V |
|-------------------------------------------------------------|--------|---|---|----------|
| NCCER MILLWRIGHT LEVEL I (1 CREDIT) | 313714 | 1 | ~ | > |
| NCCER MILLWRIGHT LEVEL II (1 CREDIT) | 313715 | 1 | ~ | V |
| NCCER Millwright III (1 CREDIT) | 313716 | 1 | ~ | ~ |
| NCCER Millwright IV (1 CREDIT) | 313717 | 1 | ~ | V |
| NCCER MOBILE CRANE LEVEL I | 313720 | 1 | ~ | V |
| NCCER MOBILE CRANE LEVEL II | 313721 | 1 | ~ | V |
| NCCER HEAVY EQUIPMENT OPERATOR LEVEL I | 313722 | 1 | ~ | V |
| NCCER HEAVY EQUIPMENT OPERATOR LEVEL II | 313723 | 1 | ~ | V |
| SAFETY AND CONSTRUCTION SKILLS: YEAR 1 | 313724 | 1 | ~ | ' |
| SAFETY AND CONSTRUCTION SKILLS: YEAR 2 | 313725 | 1 | ~ | ' |
| NCCER Construction Crafts | 313726 | 1 | ~ | V |
| Quality Controls | 313727 | 1 | V | V |
| NCCER INDUSTRIAL MAINTENANCE LEVEL II (1 CREDIT) | 313729 | 1 | ~ | v |
| NCCER INDUSTRIAL MAINTENANCE ELECTRICAL & INSTRUMENTATION I | 313730 | 2 | V | V |
| NCCER Rigging I (1 Credit) | 313731 | 1 | V | V |
| NCCER Rigging I (2 Credit) | 313732 | 2 | V | V |
| NCCER Rigging I (3 Credit) | 313733 | 3 | ~ | V |

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| | 313734 | 1 | ~ | V |
|----------------------------------------|--------|---|----------|----------|
| NCCER Rigging II (1 Credit) | 313/34 | 1 | <i>V</i> | |
| NCCER Rigging II (2 Credit) | 313735 | 2 | V | • |
| NCCER Rigging II (3 Credit) | 313736 | 3 | ~ | ✓ |
| NCCER Rigging III (1 Credit) | 313737 | 1 | ~ | ✓ |
| NCCER Rigging III (2 Credit) | 313738 | 2 | ~ | ✓ |
| NCCER Rigging III (3 Credit) | 313739 | 3 | ~ | ~ |
| NCCER MILLWRIGHT LEVEL I (2 CREDITS) | 313740 | 2 | ~ | ✓ |
| NCCER MILLWRIGHT LEVEL I (3 CREDITS) | 313741 | 3 | ~ | ✓ |
| NCCER MILLWRIGHT LEVEL II (2 CREDITS) | 313742 | 2 | ~ | ~ |
| NCCER MILLWRIGHT LEVEL II (3 CREDITS) | 313743 | 3 | ~ | v |
| NCCER MILLWRIGHT LEVEL III (2 CREDITS) | 313744 | 2 | ~ | v |
| NCCER MILLWRIGHT LEVEL III (3 CREDITS) | 313745 | 3 | V | v |
| NCCER MILLWRIGHT LEVEL IV (2 CREDITS) | 313746 | 2 | V | v |
| NCCER MILLWRIGHT LEVEL IV (3 CREDITS) | 313747 | 3 | ~ | v |
| NCCER INSULATING I | 313830 | 2 | V | ✓ |
| Introduction to Logistics | 313831 | 1 | V | |
| Transportation Management | 313832 | 1 | V | |
| Supply Chain Management | 313833 | 1 | ~ | |

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| Management Information Systems | 313834 | 1 | ~ | |
|--------------------------------------------------------------------------------------------|--------|---|---|----------|
| Warehouse and Inventory Management | 313835 | 1 | ~ | |
| Maintenance Assistant | 313836 | 1 | ~ | |
| Logistics I | 313837 | 1 | ~ | |
| Logistics II | 313838 | 1 | ~ | |
| Logistics III | 313839 | 1 | ~ | |
| Logistics IV | 313840 | 1 | ~ | |
| NCCER Plumbing I (1 Credit) | 321500 | 1 | ~ | V |
| NCCER Plumbing I (2 Credits) | 321502 | 2 | ~ | V |
| NCCER Plumbing I (3Credits) | 321503 | 3 | ~ | V |
| NCCER Plumbing II (1 Credit) | 321505 | 1 | ~ | V |
| NCCER Plumbing II (2 Credit) | 321512 | 2 | ~ | V |
| NCCER Plumbing II (3 Credit) | 321513 | 3 | ~ | V |
| LCTCS course(s) that generate Dual Enrollment credit aligned with approved pathway courses | | | | |

^{*-} Courses that count towards an academic requirement cannot also count towards the requirement of 9 Carnegie credits for a graduation pathway.

Note: course codes beginning with "01", "04", "07", "08", "09", "10", "11" or "31" are CTE courses that qualify for the basic 6% CTE adder payment.

| Universal Jump Start Courses – these courses are part of every Jump Start graduation pathway | | | | |
|----------------------------------------------------------------------------------------------|-------------|------------------|--------|--------|
| Course Title | Course Code | Carnegie Credits | CTE 6% | CDF 6% |
| Accounting | 040101 | 1 | | |
| Accounting II | 040104 | 1 | | |

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| Entrepreneurship (Business) | 040110 | 1 | | |
|-------------------------------------------------------------|--------|-----|---|--|
| Word Processing | 040203 | 1 | | |
| Computer Technology Literacy | 040220 | 1 | | |
| Keyboarding | 040225 | 1/2 | | |
| Keyboarding Applications | 040226 | 1/2 | | |
| Keyboarding | 040229 | 1 | | |
| Business Law | 040303 | 1/2 | | |
| Business Communications | 040305 | 1 | 0 | |
| Principles of Business | 040306 | 1 | | |
| Business Math* | 040307 | 1 | | |
| Business Computer Applications (BCA) | 040400 | 1 | | |
| Introduction to Business Computer Applications (IBCA) | 040401 | 1 | | |
| Customer Service | 041001 | 1 | | |
| Personal Finance | 041022 | 1/2 | | |
| Principles of Marketing I | 041025 | 1 | | |
| Principles of Marketing II | 041026 | 1 | | |
| Entrepreneurship - Marketing | 041040 | 1 | | |
| Entrepreneurship II - Advanced Micro-Enterprise Credentials | 041041 | 1 | | |
| JAG III | 042030 | 1 | | |
| JAG IV | 042040 | 1 | | |
| Speech I | 051101 | 1 | | |
| Speech II | 051102 | 1 | | |
| Career Success Skills | 080407 | 1 | | |

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| Principles of Finance | 080670 | 1/2 | |
|--------------------------------------------------------------------|--------|-----|--|
| Entrepreneurship (NAF) | 080685 | 1/2 | |
| Managerial Accounting | 080691 | 1/2 | |
| Customer Service | 080720 | 1/2 | |
| Assistive Technology for the Visually Impaired | 080900 | 1 | |
| Business Enterprises for the Visually Impaired | 080901 | 1 | |
| Braille I | 080902 | 1 | |
| Braille II | 080903 | 1 | |
| First Responder | 090710 | 1/2 | |
| First Responder | 090711 | 1 | |
| First Responder | 090712 | 2 | |
| Technical Writing* [TOPS Tech-qualifying English course] | 120350 | 1 | |
| AMERICAN SIGN LANGUAGE I | 123456 | 1 | |
| AMERICAN SIGN LANGUAGE II | 123457 | 1 | |
| Technical Reading and Writing* (NOT a TOPS Tech-qualifying course) | 125010 | 1 | |
| Business Communications | 125030 | 1 | |
| Financial Literacy (formerly Financial Mathematics)* | 160345 | 1 | |
| Technical Math* | 165010 | 1 | |
| JR ROTC III | 170003 | 1 | |
| JR ROTC IV | 170004 | 1 | |
| Law Studies | 220506 | 1 | |
| Industrial and Plant Safety | 311921 | 1 | |
| Introduction to Hazardous Materials | 311922 | 1 | |

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| Workplace Safety (1 credit) | 311923 | 1 | | |
|--------------------------------------------------------------------------|--------|-----------------------------------------------|---|-------------|
| Workplace Safety (2 credits) | 311924 | 1 | 0 | |
| Financial Literacy (formerly Financial Mathematics) INACTIVE COURSE CODE | 040304 | Please use course code 160345 for this course | | this course |

^{*-} Courses that count towards an academic requirement cannot also count towards the requirement of 9 Carnegie credits for a graduation pathway.

Note: course codes beginning with "01", "04", "07", "08", "09", "10", "11" or "31" are CTE courses that qualify for the basic 6% CTE adder payment.

Career Readiness Courses – these courses are part of every Jump Start pathway

These courses all qualify as Career Readiness courses. Every Jump Start student must take a minimum of one Carnegie credit of Career Readiness courses.

There is no limit on the number of Career Readiness course credits a student may apply to the 9 CTE course credit requirement for the Jump Start Career Diploma.

Career Readiness courses are universal courses – they apply to every Jump Start graduation pathway.

| Course Title | Course Code | Carnegie Credits | CTE 6% | CDF 6% |
|-------------------------------------------------------------------------------------|-------------|------------------|--------|--------|
| AgriScience I* | 010301 | 1 | | |
| Career Readiness Agriscience Agribusiness Natural Resources | 010331 | 1 | | |
| JAG I | 042010 | 1 | | |
| JAG II | 042020 | 1 | | |
| Education for Careers | 080400 | 1/2 | | |
| Education for Careers | 080401 | 1 | | |
| Journey to Careers Part 1 | 080402 | 1/2 | | |
| Journey to Careers | 080403 | 1 | | |
| Journey to Careers Part 2 | 080404 | 1/2 | | |
| Education for Careers Part I | 080405 | 1/2 | | |
| Education for Careers Part II | 080406 | 1/2 | | |
| Basic Career Readiness | 080409 | 1 | | |
| Advanced Career Readiness (including regionally-developed Career Readiness Courses) | 080410 | 1 | | |

^{*-} Courses that count towards an academic requirement cannot also count towards the requirement of 9 Carnegie credits for a graduation pathway.

Note: course codes beginning with "01", "04", "07", "08", "09", "10", "11" or "31" are CTE courses that qualify for the basic 6% CTE adder payment.

Internships, Cooperative Courses and Virtual Workplace Experience Courses

Cooperative courses, Virtual Workplace Experience courses, Pre-Apprenticeship and Internships (with the exception of Non-CTE Internships) are universal courses - they apply to every Jump Start graduation pathway.

Internships

There are three types of internships:

- 1) **CDF-Qualifying Internships** where students are placed in a company that operates in one of the WIC-approved high-demand industry sectors. CDF-Qualifying Internships qualify for *both* the 6% MFP adder paid for all CTE courses *and* the 6% Career Development Fund (CDF) adder;
- 2) **CTE Internships** where students are placed in a company that operates in any other industry sectors. CTE Internships qualify *only* for the 6% MFP adder for all CTE courses; and
- 3) **Non-CTE** internships where students are placed in a non-business internship. Non-CTE Internships do not qualify for any MFP adder. Examples of Non-CTE Internships include internships at a school office, a volunteer organization or a religious organization. Non-CTE Internships are not part of any Jump Start graduation pathway.

WIC-Approved High-Demand Industry Sectors

Internships that qualify for the 6% CDF payment *must* be in a WIC-approved high-demand industry sector.

- Automotive Service/Repair
- Construction Crafts
- Culinary (<u>only</u> for students pursuing the statewide ProStart/ SafeServ credentials)
- Healthcare
- HVAC
- Information Technology
- Manufacturing
- Pharmacy
- Transportation and Logistics

| Internships | | | | | | |
|-------------------------------------------------------------------------------|-------------|------------------|--------|--------|--|--|
| Course Title | Course Code | Carnegie Credits | CTE 6% | CDF 6% | | |
| CDF-Qualifying CTE Internship I (2 CREDITS) | 080200 | 1 | | | | |
| CDF-Qualifying CTE Internship II (2 CREDITS) | 080201 | 2 | | | | |
| CDF-Qualifying CTE Internship I (1 CREDIT) | 080202 | 1 | | | | |
| CDF-Qualifying CTE Internship II (1 CREDIT) | 080203 | 2 | | | | |
| CTE Internship I (1 credit; Non-CDF) | 110402 | 1 | | | | |
| CTE Internship I (2 credits; Non-CDF) | 110403 | 2 | | | | |
| CTE Internship II (1 credit; Non-CDF) | 110404 | 1 | | | | |
| CTE Internship II (2 credits; Non-CDF) | 110405 | 2 | | | | |
| Non-CTE Internships are <u>not</u> part of any Jump Start graduation pathway. | | | | | | |
| Non-CTE Internship I | 400200 | 1 | | | | |
| Non-CTE Internship I | 400210 | 2 | | | | |
| Non-CTE Internship II | 400220 | 2 | | | | |
| Non-CTE Internship II | 400230 | 1 | | | | |

| Virtual Workplace Experience Courses approved for 2016-2017 | | | | | | |
|-------------------------------------------------------------|-------------|------------------|---------------|--------|--|--|
| Course Title | Course Code | Carnegie Credits | CTE 6% | CDF 6% | | |
| Virtual Workplace Experience I | 080204 | 1/2 | | | | |
| Virtual Workplace Experience I | 080205 | 1 | | | | |
| Virtual Workplace Experience II | 080206 | 1/2 | | | | |
| Virtual Workplace Experience II | 080207 | 1 | | | | |
| Authentic Workplace Experience | 080212 | 1 | | | | |

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| Cooperative Courses | | | | | |
|------------------------------------------|-------------|------------------|--------|--------|--|
| Course Title | Course Code | Carnegie Credits | CTE 6% | CDF 6% | |
| Cooperative AgriScience Education I | 010323 | 3 | | | |
| Cooperative AgriScience Education II | 010325 | 3 | | | |
| Cooperative Office Education | 040205 | 3 | | | |
| Cooperative Marketing Education I | 041010 | 3 | | | |
| Cooperative Marketing Education II | 041011 | 3 | | | |
| General Cooperative Education I | 080300 | 3 | | | |
| General Cooperative Education II | 080301 | 3 | | | |
| Cooperative Health Occupations | 090004 | 3 | | | |
| Cooperative Family and Consumer Services | 100800 | 3 | | | |
| Cooperative Technology Education | 110098 | 3 | | | |

| Pre-Apprenticeship Courses | | | | |
|-----------------------------------|-------------|------------------|--------|---------------|
| Course Title | Course Code | Carnegie Credits | CTE 6% | CDF 6% |
| Pre-Apprenticeship I (2 credits) | 080208 | 2 | | |
| Pre-Apprenticeship II (2 credits) | 080209 | 2 | | |
| Pre-Apprenticeship I (1 credit) | 080210 | 1 | | |
| Pre-Apprenticeship II (1 credit) | 080211 | 1 | 0 | |

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| CDF-Qualifying Pre-Apprenticeship Courses | | | | | |
|---------------------------------------------------|-------------|------------------|--------|--------|--|
| Course Title | Course Code | Carnegie Credits | CTE 6% | CDF 6% | |
| CDF-QUALIFYING PRE-APPRENTICESHIP I (1 CREDIT) | 080230 | 1 | | | |
| CDF-QUALIFYING PRE-APPRENTICESHIP I (2 CREDITS) | 080231 | 2 | | | |
| CDF-QUALIFYING PRE-APPRENTICESHIP II (1 CREDIT) | 080233 | 1 | | | |
| CDF-QUALIFYING PRE-APPRENTICESHIP II (2 CREDITS) | 080234 | 2 | | | |
| CDF-QUALIFYING PRE-APPRENTICESHIP III (1 CREDIT) | 080236 | 1 | | | |
| CDF-QUALIFYING PRE-APPRENTICESHIP III (2 CREDITS) | 080237 | 2 | | | |
| CDF-QUALIFYING PRE-APPRENTICESHIP IV (1 CREDIT) | 080239 | 1 | | | |
| CDF-QUALIFYING PRE-APPRENTICESHIP IV (2 CREDITS) | 080240 | 2 | | | |

Culminating Credentials/

Certifying

Agencies

Culminating Credential(s)

Statewide Credentials

ADVANCED:

- 1) National Center for Construction Education and Research (NCCER)
 Level 2 or above in the following areas: Carpentry, Electrical, Heavy Equipment Operator, HVAC, Industrial Maintenance Mechanic, Instrumentation, Millwright, Mobile Crane, Pipefitting and Welding
- ABC-Pelican Level 2 AWS Modules, with student welds confirmed to American Society of Mechanical Engineer Standards by an independent testing company
- HVAC Excellence EPA Universal Certification plus HVAC Excellence Electrical, Electric Heat and Air Condition Certifications
- 4) NIMS, Level 2 National Institute for Metalworking Skills (NIMS)
- 5) Carpenter International Training Fund: Core Connections, Level 2 or above

OR

Attain a Louisiana post-secondary institution Technical Diploma (TD) or above aligned with this pathway

BASIC:

- 1) American Design Drafting Association (ADDA) Apprentice Drafter
- 2) ABC-Pelican Level 1 AWS Modules, with student welds confirmed to American Society of Mechanical Engineer Standards by an independent testing company
- 3) ASE Student Certifications National Institute for Automobile Service Excellence (ASE) (see Auto Repair pathway for details on standards for basic statewide credential)
- 4) Autodesk AutoCAD Autodesk
- 5) Basic Access Training Scaffolding, Louisiana Industrial Scaffolding Committee
- 6) Certification for Manufacturing (C4M)— Louisiana Economic Development (LED)
- 7) Certification for Machining (C4Machining) LED
- 8) Certified Logistics Associate, Manufacturing Skill Standards Council (MSSC)
- 9) Certified Logistics Technician, MSSC
- 10) Global Logistics Associate American Society of Transportation and Logistics (AST&L)
- 11) HVAC Excellence EPA Universal Certification
- 12) NCCER Level 1 in the following areas: Carpentry, Electrical, Heavy Equipment Operator, HVAC, Industrial Maintenance Mechanic, Instrumentation, Millwright, Mobile Crane, Pipefitting and Welding
- 13) NIMS Machining Level 1 National Institute for Metalworking Skills (NIMS)
- 14) Production Safety Systems T-2 / API-U American Petroleum Institute
- 15) Safety and Pollution Prevention S/P2
- 16) HVAC Excellence Heating, Electrical Air Conditioning Technology (H.E.A.T.)
- 17) Carpenter International Training)und: Core Connections, Level 1 OR
- 18) Attain a Louisiana post-secondary institution Certificate of Technical Studies (CTS) aligned with this pathway

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Culminating

Certifying Industry

Agency(ies)

Credential(s) /

Regional Credentials

Core Credentials: students must attain one credential from the list below:

- 1) Emergency Medical Responder Louisiana Department of Health Emergency Medical Services section
- 2) FEMA IS-0700.A National Incident Management System
- 3) Regional Micro-Enterprise Credential (Baton Rouge Area Chamber; BRAC)
- 4) NCCER Construction Craft Laborer Level 1 (National Center for Construction Education and Research)
- 5) NCCER Core and Completion of Designated Helper Modules in the following areas: Carpentry, Electrical, Industrial Maintenance Mechanics, Instrumentation (requested deferred at this time), Pipefitter, Welder (first four modules of ABC-Pelican AWS Level 1 certification)
- 6) Technical Competency Area (TCAs) in the following areas (course codes may differ):
 - a) Aviation Maintenance 15 hours: AMTG 1010, AMTG 1020, AMTG 1030, AMTG 1040, AMTG 1050, AMTG 1060, AMTG 1070, AMTG 1080, AMTG 1090
 - b) General Industry Technician 6 college credits: INDT 1010 and INDT 1030 OR PTEC 1010 and PTEC 2030
 - c) Industrial Instrumentation Technology 12 hours: ORNT 1000, CPTR 1000, INST 1120, INST 1420, INST 1110 or 16 hours: INST 1111, INST 1010, INST 2722, ELEC 1220
 - d) Industrial Maintenance Technology 10 hours: IMMT 1013, IMMT 1102, CPTR 1005, IMMT 1112

OR

- 7) C4M Helper Student attains passing grades in the initial two courses of the C4M curriculum (Introduction to Manufacturing, Manufacturing Tools and Equipment) AND either: a) NCCER Core; OR b) OSHA 30
- 8) C4Machining Helper Student attains passing grades in the initial two courses of the C4Machining curriculum AND either:
 a) NCCER Core; OR b) OSHA 30

See important notes below concerning Welding, C4M Helper and C4Machining Helper Modules.

Complementary Credentials: students must attain two credentials from the list below:

Recommended Safety Complementary Credentials

- 1) Basic Safety Orientation Association of Reciprocal Safety Councils
- 2) First Aid for Students Certification American Red Cross, American Heart Association, National Safety Council or approved equivalent or approved equivalent*
- 3) OSHA 10 General Industry OSHA Certificate of Completion

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| | |
| | 4) OSHA 10 – Construction - OSHA Certificate of Completion |
| | * - Jump Start policy is flexible in recognizing all legitimate First Aid programs. Currently-approved First aid for Student Certification include American Red Cross, American Heart Association and National Safety Council. If a district or charter school wants to use a different First Aid certification, they must provide Jump Start with evidence that their intended First Aid certification includes all required components as well as a practical certification. Successful completion of First Aid certification requirements in Regional and Integrated pathways may include First Aid only, CPR and AED only, or a comprehensive combination of First Aid, CPR and AED. |
| | Recommended Computer Literacy Complementary Credentials |
| | 5) Internet and Computing Core Certification (IC³) – Certiport |
| | 6) Microsoft Office Specialist Excel – Microsoft and Certiport |
| | 7) Microsoft Office Specialist PowerPoint – Microsoft and Certiport |
| | 8) Microsoft Office Specialist Word – Microsoft and Certiport |
| | Other Recommended Complementary Credentials |
| | 9) Customer Service and Sales – National Retail Federation |
| | 10) National Career Readiness Certificate WorkKeys Silver, Gold or Platinum - ACT |
| | 11) NCCER Core – National Center for Construction Education Research (NCCER) |
| | 12) Carpenter International Training Fund: Core Connections - Core |
| | 13) Complementary Micro-Enterprise Credential - BRAC (may not be used in conjunction with Regional Micro-Enterprise Credential) |
| Credentials No | Complementary Credentials No Longer Approved for this Pathway |
| Longer Authorized for | HAZWOPER (not a Jump Start credential) |
| this Pathway | See the Jump Start Policy Regarding OSHA Courses / Credentials (available for download from the Jump Start website) for |

See important note on the next page about the Welding, C4M and C4Machining credentials.

additional details

this Pathway

Important Note on the Welding Credential

The LDOE supports the state's priority (as articulated by the Louisiana Workforce Investment Council - WIC) in maximizing the opportunities for students to receive welding training and earn welding industry-based credentials.

Therefore, the LDOE will approve pilot implementations of regionally-developed AWS Certification progressions as **the equivalent of the currently – approved Basic Statewide credential** through the 2018 – 2019 school year.

The two alternative AWS certifications that are currently approved as Basic Statewide credentials are:

- 1) AWS Certified Welder Code-D1.1; Process Shielded Metal Arc Welding (SMAW); Positions 1F 4F; and
- 2) AWS Certified Welder Code-D1.1; Process Shielded Metal Arc Welding (SMAW); positions 1F, 2F, 1G, 2G

Jump Start teams and/or districts seeking to gain approval for an alternative AWS Basic Statewide certification should forward their proposal to JumpStart@la.gov. All proposals must include documentation from local industry that the proposed credential will be regarded by employers as a Basic Statewide certification equivalent when it comes to hiring and compensation considerations.

During the summer of 2019 the LDOE will evaluate the hiring experiences of student with alternative Welder credentials. At that time, the LDOE (in collaboration with the LWC and WIC) will determine which Welder alternative Basic Statewide Credentials will continue to be included in Jump Start pathways.

Important Note on the C4M Helper and the C4Machining Helper Credentials

The LDOE supports the state's priority (as articulated by the Louisiana Workforce Investment Council - WIC) in maximizing the opportunities for students to receive training in advanced manufacturing.

Therefore, the LDOE will approve pilot implementations of C4M Helper and the C4Machining Helper certifications that require students to: a) complete the first two courses of the C4M or C4Machining course progression; and b) attain OSHA 30 certification.

During the summer of 2019 the LDOE will evaluate the hiring experiences of students with this C4M Helper and C4Machining certifications. At that time, the LDOE (in collaboration with Louisiana Economic Development, the LWC and WIC) will determine whether the C4M Helper and C4Machining certifications will continue to allow OSHA 30 as a substitute for NCCER Core.

Sample Schedule

This schedule is *only one example* of how a student can meet the requirements of this pathway and graduate on time with the required culminating credential(s).

Each high school will develop its own standard schedules for Jump Start students based on the courses available to its students (in school, at the local technical college, or via Course Choice).

| Sample Schedule – Statewide Credential | | | | | |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--|--|
| 9 th Grade | 10 th Grade | 11 th Grade | 12 th Grade | | |
| Algebra I English I Physical Science Civics Journey to Careers NCCER Core Physical Education I | Geometry English II Biology U. S. History Introduction to Business Computer Applications NCCER Electrical I Physical Education II / Health | Math Essentials English III NCCER Welding Technology I Basic Technical Drafting Elective Course Elective Course Elective Course | Financial Literacy English IV NCCER Welding Technology II (3 credits) Elective Course Elective Course | | |
| 7 credits | 7 credits | 7 credits | 7 credits | | |
| Credential Earned by this Hypothetical Student | | ABC-Pelican Level 1 AWS Modul | es | | |

^{* -} includes course material that enables students to attain the NCCER Core credential

| Pathway |
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| | | Sample Schedule – | Regional Credential | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 9 th Grade | | 10 th Grade | 11 th Grade | 12 th Grade |
| Algebra I English I Physical Science Civics Journey to Careers General Technology Education Physical Education I Geometry English II Biology U. S. History Introduction to Business Computer Applications First Responder Physical Education II / Health | | Math Essentials English III Basic Electricity Basic Technical Drafting NCCER Core Elective Course Elective Course | Financial Literacy English IV NCCER Electrical I Advanced Technical Drafting Elective Course Elective Course Elective Course | |
| 7 credits | | 7 credits | 7 credits | 7 credits |
| | | Core Credential | Comple | ementary Credentials |
| Credentials Earned by this Hypothetical Student | NCCER Core and Completion of Designated NCCER Electrician I Helper Modules | | Basic First Aid Microsoft Office Word Special | list (MOS) – Microsoft and Certiport |

^{* -} includes course materials that enable students to attain the NCCER Core credential

Every Pathway Can be Adapted for Students Meeting the April Dunn Act Eligibility Criteria

Every Jump Start graduation pathway can be adapted for students with disabilities who meet the April Dunn Act eligibility criteria. Students must complete nine credits of CTE courses from the courses listed in the pathway. The IEP team has the authority to determine the credentialing level a student must achieve for the purposes of graduation (analogous to using individual performance criteria to meet EOC requirements for the purposes of graduation).

IEP teams with questions about how to adapt this graduation pathway for their student should contact JumpStart@la.gov

| Approved 2017-2018 | Graduation Pathwa | y |
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