
CAREER AND TECHNICAL TRADE & INDUSTRIAL EDUCATION (CTTIE) TEACHING CERTIFICATION APPLICATION

Louisiana provides CTTIE certificates to Louisiana employing public school systems for applicants meeting the requirements described in [Bulletin 746: Louisiana Standards for State Certification of School Personnel](#). The CTTIE certificates authorize employment for instructors of Career and Technical Education (CTE) courses.

The **CTTIE-Provisional certificate** is a one-year, non-renewable certificate issued while the instructor completes requirements for the CTTIE-1. CTTIE-Provisional eligibility requirements:

- Applicant shall hold a high school diploma, or have passed an equivalency test approved by LDOE.
- Applicant shall have a minimum of four years full time work experience or 7,680 hours of experience aligned to the CIP area in the specific career/technical field, of which at least one year of experience was acquired within the five calendar years immediately prior to certification. Having CIP-related degree(s) and/or an IBC can fulfill up to three years of the four years required work experience.
- Applicant holds current state or national license or IBC (when applicable – refer to CIP/Credential chart in this application).

The **CTTIE-1 certificate** is an entry level certificate (comparable to a Level 1 teaching certificate, but specific to industry expert area(s) only). It is valid for three years initially and may be extended for a period of one year at the request of the employing school system, with a limit of two such extensions. CTTIE-1 eligibility requirements:

- Applicant meets all requirements for the CTTIE-Provisional certificate.
- Applicant completes a New Instructor Workshop (applicants with at least three years of effective K-12 teaching experience as defined by Bulletin 130 or three years of post-secondary teaching experience are exempt from New Instructor Workshop).

The **CTTIE-2 certificate** is valid for five years initially, and is renewable every five years with the instructor successfully meeting the standards of effectiveness for at least three years during the five-year initial or renewal period pursuant to Bulletin 130 and R.S. 17:3902 (comparable to the Level 2 or 3 teaching certificate). CTTIE-2 eligibility requirements:

- Applicant holds or meets eligibility requirements for the CTTIE-1 certificate.
- Applicant has successfully met the standards of effectiveness for at least three years.
- Applicant has three years of teaching experience in an approved educational setting.

Submitting application: Louisiana employing school system submits the following items as a single PDF file through the [online educator certification portal](#). The following items are required as part of a complete application packet and must be signed and dated with current date:

1. **Copy of Applicant Social Security Card -and- Driver's License/State ID** (these are required with every application)
2. **Application** form with all information provided, signed and dated within the last 90 days
3. **Professional Conduct** form with all questions answered, signed, and dated by the applicant
4. **Industry/Work & Teaching Experience Verification** including both non-teaching and teaching experience signed and dated within the last 90 days
5. **Copy of High School Diploma or Equivalency Exam and Transcripts** showing degree(s) awarded/earned and/or coursework completed; all degrees will be placed on the teaching certificate if transcripts included. If applicant is a college graduate (submitting transcripts), no high school diploma documentation is required.
6. **Copy of Current State/National License or Industry-Based Credential (IBC)** (when applicable – refer to the CIP/Credential chart in this application)
7. **New Instructor Workshop Documentation** (if applicable)
8. **Copy of Online Payment Confirmation** email or screenshot* - Use [Processing Fee Schedule](#) to determine amount due. Payment is non-refundable and does not guarantee certification but is used for review of submitted documents. Applicant will access the payment portal through the educator account on [TeachLA Live! portal](#) in order to make fee payment to LDOE.

TO BE SUBMITTED BY EMPLOYING SCHOOL SYSTEM

Handwritten documents will not be accepted for certification processing.

Social Security Number _____ (no dashes, no spaces)	Email Address: _____
Legal Name of Applicant: _____ Date of Birth: _____	
Check here if requesting name change; name will be changed to match Social Security card.	
Address: _____	
(Street)	(City) (State) (Zip Code)
Phone: (____) _____	LA Certificate #: _____ Payment Confirmation # _____ <small>(Provide email confirmation or screenshot of payment with documents)</small>

Certification Area/CIP Code Requested

Refer to CIP/Credential chart to identify the appropriate Certification Area. No more than two Certification Areas can be included in a single application. If more than two are needed, submit additional CTTIE application with fee.

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National/State Licensure or IBC Aligned to Certification Area/CIP Code Requested

A copy of this credential must be submitted with your application if required according to the CIP/Credential chart.

Licensure or IBC Name:	Issuing Agency/Board:
Licensure or IBC Number:	Expiration Date:

Work Experience (industry specific and non-teaching) – include additional pages as needed

Name of Employer	From MM/YYYY	To MM/YYYY	Explanation of Duties

Teaching Experience (postsecondary, registered apprenticeship, or LWC approved training provider teaching)

Educational Institution	From MM/YYYY	To MM/YYYY	Content Taught

I/We request the issuance or renewal of a CTTIE certificate appropriate to my credentials.

*I certify that the request, credentials, and successful experience as listed above are complete and correct according to the official records on file in the Louisiana employing school system providing this verification. I agree that my **electronic signature as entered/typed below is the legal equivalent of my manual signature on this application.***

Signature of Applicant:

Date:

Signature of Career/Tech Ed Supervisor:

Date:

Signature of Employing School System:

Date:

APPLICANT'S LEGAL NAME:	SSN: <i>(No Dashes)</i>
ADDRESS: (Street Address, Including City, State, Zip)	DATE OF BIRTH: <i>MM/DD/YYYY</i>

ANSWER <u>ALL</u> QUESTIONS	Check	
	YES	NO
1. Have you ever had any professional license/certificate denied, suspended, revoked, or voluntarily surrendered? If YES , in which state? _____		
2. Are you currently being reviewed or investigated for purposes of such action as stated in #1 or is such action pending? If YES , in which state? _____		
3. Have you ever been convicted of any felony offense, been found guilty or entered a plea of <i>nolo contendere</i> (no contest), even if adjudication was withheld? If yes, please provide the following information: Date of Conviction: _____ State of Conviction: _____ Court Jurisdiction of Conviction: _____		
4. Have you ever been convicted of a misdemeanor offense that involves any of the following: a. Sexual or physical abuse of a minor child or other illegal conduct with a minor child. b. The possession, use, or distribution of any illegal drug as defined by Louisiana or federal law.		
5. Have you ever been granted a pardon or expungement* for any offense as stated in #3 or #4?		



NOTICE---EXPUNGEMENTS, FIRST OFFENDER PARDONS, PRE-TRIAL DIVERSIONS: Criminal Background Checks (CBCs) conducted for purposes of employment will be conducted in accordance with La. R.S. 17:15 and La. R.S. 15:587.1. Pursuant to Louisiana law R.S. 15:587.1., background checks shall disclose **ALL ARRESTS, COURT ACTION and CONVICTIONS, (Including but not limited to expungements, first offender pardons and pre-trial diversion), and a copy of the report shall be provided to the Louisiana Department of Education (LDE), in addition to the potential employer or LA Education Agency (LEAs)s.**

***Per BESE policy set forth in Bulletin 746, Louisiana Standards for State Certification of School Personnel, Section 903.C, "failure to disclose actions such as first offender pardons, pre-trial diversion, expungements, etc. is grounds for certification denial and/or revocation."**

If you answered "YES" to any questions, #1 through #5, you must provide court **certified** copies of all documents and proceedings, civil records of Federal, State and/or District School Board actions, or other relevant documents that provide full disclosure of the nature and circumstances of **EACH** separate incident in your application packet.

I affirm and declare that all information given by me in the responses to items #1 through #5 above is true, correct, and complete to the best of my knowledge. I understand that any misrepresentation of facts, by omission or addition, may result in criminal prosecution and/or the denial or revocation of my teacher certificate. I agree that my electronic, typed signature as entered below is the legal equivalent of my manual signature on this document.

SIGNATURE OF APPLICANT:	DATE SIGNED:
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Certification Area/Classification of Instructional Programs (CIP) Chart

(revised August 30, 2022)

This document contains the Certification Area/CIP codes to be used for CTTIE certification application. The document is organized by industry cluster. Each Certification Area/CIP code is identified in the document index below. In order to help determine the appropriate Certification Area/CIP code to use, this document contains the following for each Certification Area/CIP code: definition, required IBCs, aligned Education, previous CIP codes aligned to the consolidated list, and examples of acceptable work experience.

Document Index

1. [Agriculture, Food, and Natural Resource](#)
 - a. 15.0506; Water Quality and Wastewater Treatment Management and Recycling Technology/Technician
2. [Architecture and Construction](#)
 - a. 46.0201; Carpentry/Carpenter
 - b. 46.9999; Construction Trades, Other
 - c. 15.1301; Drafting and Design Technology/Technician, General
 - d. 46.0302; Electrician
 - e. 47.0201; Heating, Air Conditioning, Ventilation And Refrigeration Maintenance Technology/Technician
 - f. 47.0302; Heavy Equipment Maintenance Technology And Technician
 - g. 46.0414; Insulator
 - h. 46.0101; Mason/Masonry
 - i. 46.0503; Plumbing Technology/Plumber
 - j. 46.0502; Pipefitting/Pipefitter And Sprinkler Fitter
 - k. 48.0506; Sheet Metal Technology/Sheet Working
3. [Arts, AV Technology and Communication](#)
 - a. 09.0702; Digital Communication and Media/Multimedia
4. [Business Management](#)
 - a. 52.0201; Business Administration and Management, General
5. [Education and Training](#)
 - a. 32.0107; Career Exploration Awareness Skills
 - b. 13.0101; Education, General
6. [Health Sciences](#)
 - a. 51.0913; Athletic Training/Trainer
 - b. 51.0810; Emergency Care Attendant (Emergency Medical Responder - EMR)
 - c. 51.0904; Emergency Medical Technology/Technician (EMT Paramedic)
 - d. 51.0000; Health Services/Allied Health/Health Sciences, General
 - e. 51.3801; Registered Nursing/Registered Nurse.
 - f. 51.2001; Pharmacy
7. [Hospitality and Tourism](#)
 - a. 12.0503; Culinary Arts / Chef Training
 - b. 52.0901; Hospitality Administration/Management, General
8. [Human Services](#)
 - a. 12.0402; Barbering/Barber
 - b. 19.0708; Child Care and Support Services Management
 - c. 12.0401; Cosmetology/Cosmetologist, General
9. [Information Technology](#)
 - a. 11.0101; Computer and Information Sciences, General
 - b. 11.0201; Computer Programming/Programmer, General
 - c. 45.0702; Geographic Information Science And Cartography
10. [Law, Public Safety, Corrections and Security](#)
 - a. 43.9999; 911 Dispatch
11. [Manufacturing](#)
 - a. 48.0510; Computer Controlled (CNC) Machinist Technology/CNC Machinist
 - b. 47.0303; Industrial Mechanics and Maintenance Technology/Technician
 - c. 48.0000; Precision Production Trades, General
 - d. 48.0508; Welding Technology/Welder
12. [Transportation, Distribution, and Logistics](#)
 - a. 49.0199; Air Transportation, Other
 - b. 47.0603; Autobody/Collision and Repair Technology/Technician
 - c. 47.0604; Automobile/Automotive Mechanics Technology/Technician
 - d. 47.0605; Diesel Mechanics Technology/Technician

Certification Area/Classification of Instructional Programs (CIP) Chart Agriculture, Food & Natural Resources

Certification Area:	15.0506; Water Quality and Wastewater Treatment Management and Recycling Technology/Technician
Definition:	A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing and using water storage, waterpower, and wastewater treatment systems. Includes instruction in water storage, power and/or treatment systems and equipment; testing and inspection procedures; system maintenance procedures; and report preparation.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● Water Distribution Operator I Basic ● Water Production Operator I Basic ● Water Treatment Operator I
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in wastewater, water distribution, or water production
Previous CIP Code alignment:	N/A
<i>Work Experience EXAMPLES</i>	Waste Water Treatment Plant Operator, Water Control Dispatcher, Water Plant Operator, Water Treatment Operator

Architecture and Construction

Certification Area:	46.0201; Carpentry/Carpenter
Definition:	A program that prepares individuals to apply technical knowledge and skills to lay out, cut, fabricate, erect, install, and repair wooden structures and fixtures, using hand and power tools. Includes instruction in technical mathematics, framing, construction materials and selection, job estimating, blueprint reading, foundations and roughing-in, finish carpentry techniques, and applicable codes and standards.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● NCCER Carpentry - License Code 100 ● CITF Carpentry – License Code 167
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in carpentry
Previous CIP Code alignment:	480703.000
<i>Work Experience EXAMPLES</i>	Assembler, Cabinet Maker, Carpenter, Construction Worker, Framer

Certification Area:	46.9999; Construction Trades, Other
Definition:	This CIP should be used for an employee whose work experience only qualifies them to teach CITF Core or NCCER Core. This Certification Area/CIP code has a limited scope of courses aligned.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● NCCER Core – License Code 34 and completion of Instructor Certification Training Program (ICTP) – License Code 179 ● CITF Core
Aligned Education:	Technical diploma, Associate's Degree, Bachelor's degree or Registered Apprenticeship in a skilled crafts area

Certification Area/Classification of Instructional Programs (CIP) Chart

Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Skilled Craftsman assistant or helper

Certification Area:	15.1301; Drafting and Design Technology/Technician, General
Definition:	A program that prepares individuals to generally apply technical skills to create working drawings and computer simulations for a variety of applications. Includes instruction in specification interpretation, dimensioning techniques, drafting calculations, material estimation, technical communications, computer applications, and interpersonal communications.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● ADDA Certified Mechanical Apprentice Drafter – License Code 150 ● ADDA Certified Architectural Apprentice Drafter – License Code 149 ● AutoDesk Inventor – License Code 44 ● AutoDesk CAD – License Code 43
Aligned Education:	Associate’s Degree or higher in drafting and design
Previous CIP Code alignment:	151301.000, 110804.000, 140501.000, 140801.000, 140803.000, 140805.000, 141001.000, 141401.000, 141901.000, 142301.000, 142401.000, 142501.000, 142701.000, 143301.000, 143801.000, 144101.000, 144201.000
<i>Work Experience EXAMPLES</i>	Architectural Designer, Architectural Drafter, Civil Drafter, Computer-Aided Drafting and Design Drafter Drafting Technician, Draftsperson

Certification Area:	46.0302; Electrician
Definition:	A program that prepares individuals to apply technical knowledge and skills to install, operate, maintain, and repair electric apparatus and systems such as residential, commercial, and industrial electric-power wiring; and DC and AC motors, controls, and electrical distribution panels. Includes instruction in the principles of electronics and electrical systems, wiring, power transmission, safety, industrial and household appliances, job estimation, electrical testing and inspection, and applicable codes and standards.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● NCCER Electrical – License Code 164 ● State Electrical License
Aligned Education:	Associate’s degree in electricity, registered apprenticeship as electrician or bachelor’s degree in electrical engineering and state license
Previous CIP Code alignment:	470101.000, 460302.000
<i>Work Experience EXAMPLES</i>	Chief Electrician; Control Electrician; Electrician; Industrial Electrician; Inside Wireman; Journeyman Electrician; Journeyman Wireman; Maintenance Electrician; Mechanical Trades Specialist

Certification Area:	47.0201; Heating, Air Conditioning, Ventilation And Refrigeration Maintenance Technology/Technician
Definition:	A program that prepares individuals to apply technical knowledge and skills to repair, install, service and maintain the operating condition of heating, air conditioning, and refrigeration systems. Includes

Certification Area/Classification of Instructional Programs (CIP) Chart

	instruction in diagnostic techniques, the use of testing equipment and the principles of mechanics, electricity, and electronics as they relate to the repair of heating, air conditioning and refrigeration systems. See also: 15.0501) Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● NCCER HVAC – License Code 133 ● EPA Section 608 Certification - License Code 181 AND Employment Ready (Air Conditioning, Electrical, OR Heating) - License Code 182 ● EPA Universal (if earned prior to implementation of the Section 608 & Employment ready credentials) - License Code 183
Aligned Education:	Technical diploma, associate degree or registered apprenticeship in heating, ventilation and air conditioning (HVAC) and refrigeration
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Air Conditioning Technician; Heating, Ventilation, Air Conditioning Installer; Heating, Ventilation, Air Conditioning Mechanic; Refrigeration Mechanic; Refrigeration Operator; Refrigeration Technician; Transportation Refrigeration Technician

Certification Area:	47.0302; Heavy Equipment Maintenance Technology And Technician
Definition:	A program that prepares individuals to apply technical knowledge and skills in the field maintenance and repair of heavy equipment, and in the general maintenance and overhaul of such equipment. Includes instruction in inspection, maintenance, and repair of tracks, wheels, brakes, operating controls, pneumatic and hydraulic systems, electrical circuitry, engines and in techniques of welding and brazing.
Required IBCs:	NCCER Heavy Equipment Operations
Aligned Education:	Technical diploma, associate degree or registered apprenticeship in heavy equipment
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Construction Equipment Mechanic, Heavy Equipment Technician, Mechanic, Mobile Heavy Equipment Mechanic

Certification Area:	46.0414; Insulator
Definition:	A program that prepares individuals to apply insulation materials to pipes, boilers, ducts, refrigeration systems, and related equipment to reduce the passage of heat, cold, sound, or fire. Includes instruction in insulation specifications, measuring and cutting insulating material, applying and securing insulation, installing vapor barriers, insulation system maintenance, asbestos removal and abatement, and safety training.
Required IBCs:	NCCER Insulating
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in floor, ceiling/wall insulation or mechanical insulation
Previous CIP Code alignment:	No Change
<i>Work Experience</i>	Insulation Installer, Insulator, Retrofit Installer, Spray Foam Installer, Warehouse Insulation Worker,

Certification Area/Classification of Instructional Programs (CIP) Chart

<i>EXAMPLES</i>	Commercial Insulator, Heat and Frost Insulator, Industrial Insulator, Mechanical Insulator
Certification Area:	46.0101; Mason/Masonry
Definition:	A program that prepares individuals to apply technical knowledge and skills in the laying and/or setting of exterior brick, concrete block, hard tile, marble and related materials, using trowels, levels, hammers, chisels, and other hand tools. Includes instruction in technical mathematics, blueprint reading, structural masonry, decorative masonry, foundations, reinforcement, mortar preparation, cutting and finishing, and applicable codes and standards.
Required IBCs:	NCCER Masonry
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in masonry
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Block Layer, Brick and Block Mason, Concrete Finisher, Mason

Certification Area:	46.0502; Pipefitting/Pipefitter And Sprinkler Fitter
Definition:	A program that prepares individuals to design, install, and test industrial and commercial piping systems and automatic fire and exposure protection systems. Includes instruction in water systems, steam systems, heating and cooling systems, lubricating systems, piping materials, installation tools operation and maintenance, valve installation and repair, technical mathematics, blueprint interpretation, and applicable codes and standards.
Required IBCs:	NCCER Pipefitter - License Code 114
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in pipefitting
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Drain Technician, Fire Sprinkler Service Technician, Pipe Fitter, Pipe Welder, Pipefitter, Sprinkler Fitter, Steamfitter

Certification Area:	46.0503; Plumbing Technology/Plumber
Definition:	A program that prepares individuals to practice as licensed plumbers by applying technical knowledge and skills to lay out, assemble, install, and maintain piping fixtures and systems for steam, natural gas, oil, hot water, heating, cooling, drainage, lubricating, sprinkling, and industrial processing systems in home and business environments. Includes instruction in source determination, water distribution, wastewater removal, pressure adjustment, basic physics, technical mathematics, blueprint reading, pipe installation, pumps, welding and soldering, plumbing inspection, and applicable codes and standards.
Required IBCs:	NCCER Plumbing
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in plumbing
Previous CIP Code alignment:	No Change
<i>Work Experience</i>	Plumber, Residential Plumber, Service Plumber

Certification Area/Classification of Instructional Programs (CIP) Chart

<i>EXAMPLES</i>	
Certification Area:	48.0506; Sheet Metal Technology/Sheet Working
Definition:	A program that prepares individuals to apply technical knowledge and skills to form, shape, bend and fold extruded metals, including the creation of new products, using hand tools and machines such as cornice brakes, forming rolls, and squaring shears.
Required IBCs:	NCCER Sheet Metal
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in metal fabrication or sheet metal including drafting and blueprint reading
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Journeyman Sheet Metal Worker, Sheet Metal Fabricator, Sheet Metal Installer, Sheet Metal Layout Mechanic, Sheet Metal Mechanic

Arts, AV Technology and Communication

Certification Area:	09.0702; Digital Communication and Media/Multimedia
Definition:	A program that focuses on the development, use, critical evaluation, and regulation of new electronic communication technologies using computer applications; and that prepares individuals to function as developers and managers of digital communications media. Includes instruction in computer and telecommunications technologies and processes; design and development of digital communications; marketing and distribution; digital communications regulation, law, and policy; the study of human interaction with, and use of, digital media; and emerging trends and issues.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● Adobe Certified Professional in Visual Design, Video Design, OR Web Design – License Code 85 ● Adobe Certified Expert – License Code 144 ● AVID Media Composer Certified User – License Code 62 ● AVID Media Composer Certified Professional – License Code 62
Aligned Education:	Technical diploma, associate degree, registered apprenticeship, or Bachelor's degree in communication, film, cinematography or photography
Previous CIP Code alignment:	90404.000, 100301.000, 500602.000, 500605.000, 090404.000, 500411.000
<i>Work Experience EXAMPLES</i>	Artist, Designer, Graphic Designer, Online Producer, Production Artist, Publications Designer, Product Designer, Audio Technician, Audio Visual Technician, Media Technician, Operations Technician, Stagehand

Business Management

Certification Area:	52.0201; Business Administration and Management, General
Definition:	A program that generally prepares individuals to plan, organize, direct, and control the functions and processes of a firm or organization. Includes instruction in management theory, human resources management and behavior, accounting and other quantitative methods, purchasing and logistics, organization and production, marketing, and business decision-making.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● Business Operations Credential ● NRF Foundation's Business of Retail: Operations & Profit – License Code 184

Certification Area/Classification of Instructional Programs (CIP) Chart

	<ul style="list-style-type: none"> ● BRAC Micro-Enterprise Statewide – License Code 158 ● CIW Web Foundations Associate ● CIW Internet Business Associate ● CIW Site Development Associate
Aligned Education:	Bachelor’s degree in Business
Previous CIP Code alignment:	520204.000, 521910.000, 520701.000, 520208.000
<i>Work Experience EXAMPLES</i>	Business Manager, General Manager, Operations Director, Operations Manager, Plant Superintendent, Store Manager

Education and Training

Certification Area:	32.0107; Career Exploration Awareness Skills
Definition:	A program that focuses on the linkage between individual capabilities and needs and the job market. Includes instruction in the variety and scope of available employment, how to access job information, and techniques of self-analysis.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● Evidence of LDOE JAG-LA training and Bachelor Degree - License Code 153 -OR- ● Evidence of LDOE Quest for Success training and Bachelor Degree - License Code 162
Required Education:	Bachelor degree required
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	

Certification Area:	13.0101; Education, General*
Definition:	A program that focuses on the general theory and practice of learning and teaching, the basic principles of educational psychology, the art of teaching, the planning and administration of educational activities, school safety and health issues, and the social foundations of education. <i>*=Persons applying for certification under this CIP code may only teach the following courses:</i> <ol style="list-style-type: none"> 1. <i>Multicultural Learning Communities (Course code: 100677)</i> 2. <i>Foundations of Education (Course code: 100678)</i>
Required IBCs:	Standard Professional Louisiana Teaching Certificate (Type A, B, C, OS, LV 1, 2, or 3) with any secondary or all-level teaching endorsement
Required Education:	Bachelor degree and completion of a traditional or alternative teacher preparation program
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	

Health Sciences

Certification Area:	51.0913; Athletic Training/Trainer
Definition:	A program that prepares individuals to work in consultation with, and under the supervision of physicians

Certification Area/Classification of Instructional Programs (CIP) Chart

	to prevent and treat sports injuries and associated conditions. Includes instruction in the identification, evaluation, and treatment of athletic injuries and illnesses; first aid and emergency care; therapeutic exercise; anatomy and physiology; exercise physiology; kinesiology and biomechanics; nutrition; sports psychology; personal and community health; knowledge of various sports and their biomechanical and physiological demands; and applicable professional standards and regulations.
Required IBCs:	<ul style="list-style-type: none"> ● Board of Certification (BOC) for the Athletic Trainer Credential -AND- ● Licensed by the Louisiana State Board of Medical Examiners (LSBME) as an Athletic Trainer - License Code 141
Required Education:	As outlined by the BOC for the Athletic Trainer and the Louisiana State Board of Medical Examiners
Previous CIP Code alignment:	No change
Work Experience EXAMPLES	Athletic Trainer

Certification Area:	51.0810; Emergency Care Attendant
Definition:	A program that prepares individuals to assist licensed EMTs, under the supervision of a physician, to prepare and transport ill or injured patients, and to operate emergency vehicles and equipment such as life support units. Includes instruction in first aid and emergency medicine field techniques, patient stabilization and care, medical field communications, equipment operation and maintenance, emergency vehicle operation, and applicable standards and regulations.
Required IBCs:	<ul style="list-style-type: none"> ● Licensed by the Louisiana Bureau of Emergency Medical Services as an EMR - License Code 72
Required Education:	Technical Diploma, associate's degree or approved training programs as Emergency Medical Responder and successful completion of National Registry certification and Louisiana EMR license
Previous CIP Code alignment:	No change
Work Experience EXAMPLES	First Responder, Fireman

Certification Area:	51.0904; Emergency Medical Technology/Technician (EMT Paramedic)
Definition:	A program that prepares individuals, under the remote supervision of physicians, to recognize, assess, and manage medical emergencies in prehospital settings and to supervise Ambulance personnel. Includes instruction in basic, intermediate, and advanced EMT procedures; emergency surgical procedures; medical triage; rescue operations; crisis scene management and personnel supervision; equipment operation and maintenance; patient stabilization, monitoring, and care; drug administration; identification and preliminary diagnosis of diseases and injuries; communication and computer operations; basic anatomy, physiology, pathology, and toxicology; and professional standards and regulations.
Required IBCs:	<p>One of the following:</p> <ul style="list-style-type: none"> ● Licensed by the Louisiana Bureau of Emergency Services as an EMT - License Code 74 ● Licensed by the Louisiana Bureau of Emergency Services as a Paramedic - License Code 161 <p>---AND---</p> <p>One of the following:</p> <ul style="list-style-type: none"> ● Document indicating instructor approval of Bureau of EMS ● EMT Instructor credential

Certification Area/Classification of Instructional Programs (CIP) Chart

Required Education:	Technical Diploma, associate degree or approved training programs as Emergency Medical Technician and successful completion of National Registry certification and Louisiana EMT license
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Emergency Medical Technician, Paramedic

Certification Area:	51.0000 Health Services/Allied Health/Health Sciences, General
Definition:	A general, introductory, undifferentiated, or joint program in health services occupations that prepares individuals for either entry into specialized training programs or for a variety of concentrations in the allied health area. Includes instruction in the basic sciences, research and clinical procedures, and aspects of the subject matter related to various health occupations.
Required IBCs:	Licensed by the appropriate Louisiana governing authority: DDS, DO, DVM, LPN – License Code 142 , MD, OT, PA, PT, SLP, Medical Assistant, Patient Care Technician *Note: Applicants that hold the following credentials should not use this CIP code: EMR, EMT, & RN
Aligned Education:	Bachelor's degree in Health Sciences or Advanced Degree such as M.D., D.O., DPT, etc.
Previous CIP Code alignment:	511201.000, 511901.000 511202.000, 510401.000
<i>Work Experience EXAMPLES</i>	Medical experience not included in other Health Science certification areas.

Certification Area:	51.3801; Registered Nursing/Registered Nurse
Definition:	A program that generally prepares individuals in the knowledge, techniques and procedures for promoting health, providing care for sick, disabled, infirmed, or other individuals or groups. Includes instruction in the administration of medication and treatments, assisting a physician during treatments and examinations, Referring patients to physicians and other health care specialists, and planning education for health maintenance.
Required IBCs:	R.N. (Louisiana License Required) or Nurse Practitioner - License Code 03
Aligned Education:	Associate's degree or higher in Nursing
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Registered Nurse

Certification Area:	51.2001; Pharmacy
Definition:	A program that prepares individuals for the independent or employed practice of preparing and dispensing drugs and medications in consultation with prescribing physicians and other healthcare professionals, and for managing pharmacy practices and counseling patients. Includes instruction in mathematics, physics, chemistry, biochemistry, anatomy, physiology, pharmacology, pharmaceutical chemistry, pharmacognosy, pharmacy practice, pharmacy administration, applicable regulations, and professional standards and ethics.

Certification Area/Classification of Instructional Programs (CIP) Chart

Required IBCs:	One of the following: <ul style="list-style-type: none"> ● Pharmacy Technician Certification - (PTCE) ● Pharmacy Technician Certification - (ExCPT)
Required Education:	Pharm.D.; current license by the Louisiana Board of Pharmacy
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Clinical Pharmacist, Hospital Pharmacist, Pharmacist, Pharmacist in Charge, Pharmacy Informaticist, Registered Pharmacist, Staff Pharmacist

Hospitality and Tourism

Certification Area:	12.0503; Culinary Arts / Chef Training
Definition:	A program that prepares individuals to provide professional chef and related cooking services in restaurants and other commercial food establishments. Includes instruction in recipe and menu planning, preparing and cooking of foods, supervising and training kitchen assistants, the management of food supplies and kitchen resources, aesthetics of food presentation, and familiarity or mastery of a wide variety of cuisines and culinary techniques.
Required IBCs:	Letter of eligibility for the ProStart National Certificate of Achievement - License Code 79 –AND- ServSafe Manager - License Code 80
Aligned Education:	Technical diploma, associate degree, registered apprenticeship, or Bachelor Degree Chef Training from accredited culinary institute
Previous CIP Code alignment:	521910.000
<i>Work Experience EXAMPLES</i>	Banquet Chef, Chef, Corporate Executive Chef, Executive Sous Chef, Head Cook, Line Cook

Certification Area:	52.0901; Hospitality Administration/Management, General
Definition:	A program that prepares individuals to serve as general managers and directors of hospitality operations on a system-wide basis, including both travel arrangements and promotion and the provision of traveler facilities. Includes instruction in principles of operations in the travel and tourism, hotel and lodging facilities, food services, and recreation facilities industries; hospitality marketing strategies; hospitality planning; management and coordination of franchise and unit operations; business management; accounting and financial management; hospitality transportation and logistics; and hospitality industry policies and regulations.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● National Restaurant Association’s ManageFirst Professional ● Certified Hospitality Instructor (AHLA) – License Code 180 - AND- Certified Guest Service Professional (AHLA) - License Code 171 ● Certified Hospitality and Tourism Management –License Code 170 - AND- Certified Guest Service Professional (AHLA) - License Code 171
Aligned Education:	Bachelor’s degree in business administration, hospitality
Previous CIP Code alignment:	521906.000

Certification Area/Classification of Instructional Programs (CIP) Chart

<i>Work Experience</i> <i>EXAMPLES</i>	
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Human Services

Certification Area:	12.0402; Barbering/Barber
Definition:	A program that prepares individuals to shave and trim facial/neck hair and beards, cut and dress hair, fit hairpieces, give facial and scalp massages, apply cosmetic treatments, and to prepare for licensure as professional barbers at various levels. Includes instruction in facial shaving; beard and mustache shaping and trimming; shampooing; hair cutting; hair styles and styling art; facial treatments and massage; chemical applications; hair and scalp anatomy and physiology; hairpiece and toupee fitting; equipment operation; health and safety; customer service; and shop business practices.
Required IBCs:	Licensed as a Barber Instructor by the Louisiana Board of Cosmetology
Required Education:	Barber Instructor's License
Previous CIP Code alignment:	No Change
<i>Work Experience</i> <i>EXAMPLES</i>	Barber

Certification Area:	19.0708; Child Care and Support Services Management
Definition:	A program that focuses on the provision and management of child care services and that prepares individuals to plan, design, and manage child care facilities and programs that meet children's developmental needs and interests and that provide safe and healthy environments. Includes instruction in child development and psychology; home- and institution-based child care; identification of diseases, injuries, and psychological trauma and applicable referrals; parent relations; personnel and business management principles; and related laws and policies.
Required IBCs:	Early Childhood Ancillary Certificate (ECAC)
Required Education:	Bachelor's degree in early childhood
Previous CIP Code alignment:	No Change
<i>Work Experience</i> <i>EXAMPLES</i>	

Certification Area:	12.0401; Cosmetology/Cosmetologist, General
Definition:	A program that generally prepares individuals to cut, trim, and style scalp, facial, and body hair; apply cosmetic preparations; perform manicures and pedicures; massage the head and extremities; and prepare for practice as licensed cosmetologists in specialized or full-service salons. Includes instruction in hair cutting and styling, manicuring, pedicuring, facial treatments, shampooing, chemical applications, esthetics, shop management, sanitation and safety, customer service, and applicable professional and labor laws and regulations.
Required IBCs:	Current Cosmetology Instructor license – License Code 82
Required Education:	Cosmetology Instructor license

Certification Area/Classification of Instructional Programs (CIP) Chart

Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Cosmetologist

Information Technology

Certification Area:	11.0101; Computer and Information Sciences, General
Definition:	A general program that focuses on computing, computer science, and information science and systems. Such programs are undifferentiated as to title and content and are not to be confused with specific programs in computer science, information science, or related support services.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● CompTIA IT Fundamentals Basic – License Code 165 ● CompTIA A+ Advanced – License Code 88 ● CompTIA Network+ Advanced – License Code 89 ● CompTIA Security+ - License Code 166
Required Education:	Bachelor’s degree in Computer Science or Information Sciences
Previous CIP Code alignment:	No change
<i>Work Experience EXAMPLES</i>	

Certification Area:	11.0201; Computer Programming/Programmer, General
Definition:	A program that focuses on the general writing and implementation of generic and customized programs to drive operating systems and that generally prepares individuals to apply the methods and procedures of software design and programming to software installation and maintenance. Includes instruction in software design, low- and high-level languages and program writing; program customization and linking; prototype testing; troubleshooting; and related aspects of operating systems and networks.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● Amazon Web Services Foundational ● Amazon Web Services Associate ● CIW Web Design Specialist ● CIW E-Commerce Specialist ● CIW JavaScript Specialist ● CIW Database Design Specialist ● CIW Perl Specialist ● CIW Web Security Associate ● CIW Web Security Specialist ● CIW Advanced HTML5 and CSS3 Specialist ● CIW User Interface Designer ● CIW Social Media Strategist ● Oracle Database PL/SQL Developer Certified Associate ● Oracle Certified Professional (OCP) Java Programmer ● Oracle Database PL/SQL Developer Certified Associate ● Oracle Certified Professional (OCP) Java Programmer I ● Oracle Certified Professional (OCP) Java Programmer II

Certification Area/Classification of Instructional Programs (CIP) Chart

	<ul style="list-style-type: none"> • Fundamentals of JavaScript, Functional Programming and Web Development • App Development with Swift
Aligned Education:	Technical diploma, associate degree, registered apprenticeship, or Bachelor's degree in computer science or computer programming
Previous CIP Code alignment:	110701.000
<i>Work Experience EXAMPLES</i>	Computer Programmer, Java Developer, Programmer, Programmer Analyst, Web Applications Programmer, Web Programmer, Information Systems Analyst, Information Technology Analyst, Webmaster

Certification Area:	45.0702; Geographic Information Science And Cartography
Definition:	A program that focuses on the systematic study of map-making and the application of mathematical, computer, and other techniques to the analysis of large amounts of geographic data and the science of mapping geographic information. Includes instruction in cartographic theory and map projections, computer-assisted cartography, geographic information systems, map design and layout, photogrammetry, air photo interpretation, remote sensing, spatial analysis, geodesy, cartographic editing, and applications to specific industrial, commercial, research, and governmental mapping problems. See also: 43.0407) Geospatial Intelligence.
Required IBCs:	Geographic Information System (GIS) ESRI User Certification
Aligned Education:	Technical diploma, associate degree, or Bachelor degree in geography or GIS technology
Previous CIP Code alignment:	143901.000
<i>Work Experience EXAMPLES</i>	Geographic Information System Technician (GIS Technician), Resource Analyst

Law, Public Safety, Corrections and Security

Certification Area:	43.9999; Security and Protective Services, Other
Definition:	Any instructional program in homeland security, law enforcement, firefighting, and related protective services not otherwise listed in this glossary.
Required IBCs:	One of the following from the International Academies of Emergency Dispatch: <ul style="list-style-type: none"> • Emergency Telecommunicator Certification 1 (911 Dispatch) - License Code 175 • Emergency Fire Dispatch - License Code 176 • Emergency Medical Dispatch - License Code 177 • Emergency Police Dispatch - License Code 178
Aligned Education:	Technical diploma, associate degree, or Bachelor degree in criminal justice
Previous CIP Code alignment:	N/A
<i>Work Experience EXAMPLES</i>	

Manufacturing

Certification Area/Classification of Instructional Programs (CIP) Chart

Certification Area:	48.0510; Computer Numerically Controlled (CNC) Machinist Technology/CNC Machinist
Definition:	A program that prepares individuals to apply technical knowledge and skills to operate computer numerically controlled (CNC) machine tools, such as lathes, mills, precision measuring tools, and related attachments and accessories, to perform machining functions, such as cutting, drilling, shaping, and finishing products and component parts. Includes instruction in CNC terminology, setup, programming, operations, and troubleshooting; blueprint reading; machining; lathe and mill operations; technical mathematics; computer literacy; CAD/CAM systems; shop and safety practices; equipment capabilities; and regulations and laws.
Required IBCs:	
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in Machinist, Millwright, or CNC Technology
Previous CIP Code alignment:	
<i>Work Experience EXAMPLES</i>	

Certification Area:	47.0303.000; Industrial Mechanics and Maintenance Technology/Technician
Definition:	A program that prepares individuals to apply technical knowledge and skills to repair and maintain industrial machinery and equipment such as cranes, pumps, engines and motors, pneumatic tools, conveyor systems, production machinery, marine deck machinery, and steam propulsion, refinery, and pipeline-distribution systems.
Required IBCs:	NCCER Industrial Maintenance Mechanic
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in industrial maintenance, electronics or electricity
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Industrial Machinery Mechanic, Industrial Mechanic, Maintenance Technician

Certification Area:	48.0000; Precision Production Trades, General
Definition:	A program that generally prepares individuals to apply technical knowledge and skills in creating products using precision crafting and technical illustration.
Required IBCs:	<p>One of the following:</p> <ul style="list-style-type: none"> ● Certification for Manufacturing (C4M) - License Code 145 ● Certification for Machining (C4 Machining) ● Certified Production Tech (CPT) & Certified Production Tech + Green Certification (CPT+) ● CITF Millwright ● NIMS Machining ● NCCER Boilermaker - License Code 169 ● NCCER Instrumentation ● NCCER Millwright
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in computer numerically controlled (CNC) metal working, plastic working, instrumentation, millwright, or advanced manufacturing

Certification Area/Classification of Instructional Programs (CIP) Chart

Previous CIP Code alignment:	480507.000
<i>Work Experience EXAMPLES</i>	Precision Millwright, Production Machinist

Certification Area:	48.0508; Welding Technology/Welder
Definition:	A program that prepares individuals to apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in arc welding, resistance welding, brazing and soldering, cutting, high-energy beam welding and cutting, solid state welding, ferrous and non-ferrous materials, oxidation-reduction reactions, welding metallurgy, welding processes and heat treating, structural design, safety, and applicable codes and standards.
Required IBCs:	One of the following: <ul style="list-style-type: none"> ● NCCER Welding – License Code 116 ● AWS Welding – License Code 35 ● CITF Welding – License Code 173
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in welding or welding technology
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Welder, Fabricator, Solderer,

Transportation, Distribution, and Logistics

Certification Area:	49.0199; Air Transportation, Other
Definition:	Any instructional program in aviation and air transportation services.
Required IBCs:	<ul style="list-style-type: none"> ● FAA Part 107
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in aviation science/technology
Previous CIP Code alignment:	N/A
<i>Work Experience EXAMPLES</i>	Pilot, remote controlled vehicle

Certification Area:	47.0603; Autobody/Collision and Repair Technology/Technician
Definition:	A program that prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structure analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.
Required IBCs:	I-CAR Collision Repair and Refinish Pro Platinum - License Code 168 or ASE Certificate in one of the following: – License Code 33 <ul style="list-style-type: none"> ● Entry Level Collision and Repair ● Entry Level Collision Repair and Refinish: Mechanical and Electrical ● Entry Level Collision Repair and Refinish: Non-structural Analysis and Damage Repair

Certification Area/Classification of Instructional Programs (CIP) Chart

	<ul style="list-style-type: none"> ● Entry Level Collision Repair and Refinish: Painting and Refinishing ● Entry Level Collision Repair and Refinish: Structural Analysis and Damage Repair
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in auto body repair
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Auto Body Repair Technician, Collision Repair Technician, Refinish Technician

Certification Area:	47.0604; Automobile/Automotive Mechanics Technology/Technician
Definition:	A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drivetrains, and heating and air condition systems.
Required IBCs:	<p>ASE Certificate - License Code 33:</p> <ul style="list-style-type: none"> ● Entry Level Automobile ● Entry Level Automotive Service Technology ● Entry Level Automotive Transmission and Transaxle ● Entry Level Brakes ● Entry Level Electrical/Electronic Systems ● Entry Level Engine Performance ● Entry Level Engine Repair ● Entry Level Heat and Air Conditioning ● Entry Level Maintenance and Light Repair ● Entry Level Manual Drivetrain and Axles ● Entry Level Steering and Suspension ● Entry Level Medium/Heavy Truck ● Entry Level Medium/Heavy Truck: Brakes ● Entry Level Medium/Heavy Truck: Diesel Engines ● Entry Level Medium/Heavy Truck: Electrical/Electronic Systems ● Entry Level Medium/Heavy Truck: Suspension & Steering ● Entry Level Medium/Heavy Truck: Inspection Maintenance & Minor Repair <p>or</p> <p>Equipment and Engine Training Council (EETC)'s Four Stroke Engine Technician Certification</p>
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in auto body mechanics
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Automobile Mechanic, Automotive Service Technician, Service Technician

Certification Area:	47.0605; Diesel Mechanics Technology/Technician
Definition:	A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain diesel engines in vehicles such as automobiles, buses, ships, trucks, railroad locomotives, and

Certification Area/Classification of Instructional Programs (CIP) Chart

	construction equipment; as well as stationary diesel engines in electrical generators and related equipment.
Required IBCs:	<p>One of the following ASE Certificates:</p> <ul style="list-style-type: none"> ● Entry Level Medium/Heavy Truck: Brakes Basic ● Entry Level Medium/Heavy Truck: Diesel Engines Basic ● Entry Level Medium/Heavy Truck: Electrical/Electronic Systems Basic ● Entry Level Medium/Heavy Truck: Suspension & Steering Basic ● Entry Level Medium/Heavy Truck: Inspection Maintenance & Minor Repair
Aligned Education:	Technical diploma, associate degree, or registered apprenticeship in diesel mechanics
Previous CIP Code alignment:	No Change
<i>Work Experience EXAMPLES</i>	Bus Mechanic, Diesel Mechanic, Fleet Mechanic, Trailer Mechanic, Transit Mechanic, Heavy Truck Mechanic