# PATHWAYS TO THE for all students

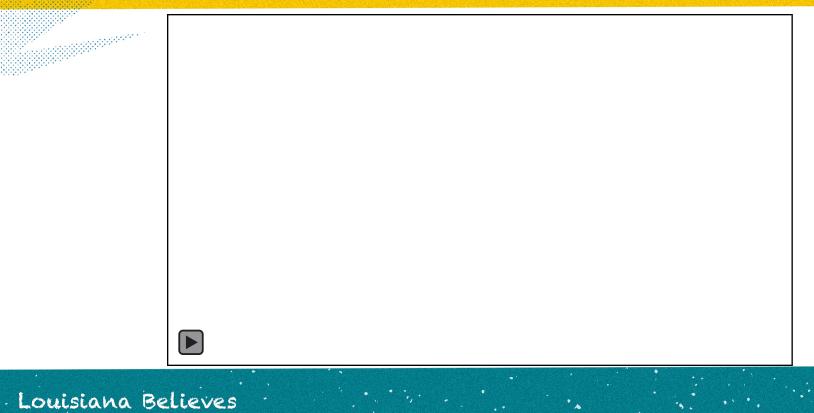
JANUARY 23, 2018 Raising Cane's River Center

2018 JUMP START CONVENTION

> DEPARTMENT of EDUCATION Louisiana Believes

### Changing Students Lives and Supporting Economic Growth







- C4M is a certification program developed by the LED FastStart Workforce Initiative Team in conjunction with individuals from business and industries across the state.
- The curriculum focuses on entry-level manufacturing skills relevant to Louisiana businesses.
- The program consists of four courses corresponding to approximately forty-five contact hours each, for a total of one hundred and eighty contact hours of classroom and laboratory work. Students must successfully complete a post assessment and instructor evaluation to receive the C4M certification.

# C4 Manufacturing (C4M)



- Four courses can be offered simultaneously or sequentially, in colleges, high schools, or work sites. They can be offered for credit or non-credit.
- Extensive additional independent study time is completed on tablets, iPads, laptops, or personal computers using PowerPoints and Interactive Training Modules (ITM).
- In addition to students receiving the C4 Manufacturing Certification, they have the opportunity to receive the OSHA 10 Certification and Certified Production Technician (CPT) Certification.

<b>C4 MANUFACTURING</b>		CERTIFICATION FOR MANUFACTURING
<b>COURSE 1 - INTRODUCTION TO MAN</b>	IUFACTURING	LED Fast Start
Unit 1 The Manufacturing Industry Unit 2 General Safety Unit 3 Quality	Unit 4 Lean Manufacturing Unit 5 Team Skills	
COURSE 2 - TOOLS & EQUIPMENT		
Unit 1 Occupational Safety Unit 2 Basic Math Unit 3 Precision Measurement	Unit 4 Hand and Power Tools Unit 5 Fluid Mechanics	
COURSE 3 - AUTOMATION		TRAINING
Unit 1 Electrical Fundamentals Unit 2 HMI/PLC Unit 3 Robotics	Unit 4 Computing PC Databases Unit 5 Instrumentation	
<b>COURSE 4 - INTRODUCTION TO FAB</b>		
Unit 1 Industrial Math Unit 2 Chemistry and Physics Unit 3 Plant Drawings, Process Controls, and Tools	Unit 4 Practical Identification of Metals Unit 5 Introduction to Machining Unit 6 Introduction to Welding	
	COURSE 1 - INTRODUCTION TO MAN Unit 1 The Manufacturing Industry Unit 2 General Safety Unit 3 Quality COURSE 2 - TOOLS & EQUIPMENT Unit 1 Occupational Safety Unit 2 Basic Math Unit 3 Precision Measurement COURSE 3 - AUTOMATION Unit 1 Electrical Fundamentals Unit 2 HMI/PLC Unit 3 Robotics COURSE 4 - INTRODUCTION TO FAB Unit 1 Industrial Math Unit 2 Chemistry and Physics Unit 3 Plant Drawings, Process Controls,	COURSE 1 - INTRODUCTION TO MANUFACTURINGUnit 1 The Manufacturing IndustryUnit 4 Lean ManufacturingUnit 2 General SafetyUnit 5 Team SkillsUnit 3 QualityUnit 5 Team SkillsCOURSE 2 - TOOLS & EQUIPMENTUnit 1 Occupational SafetyUnit 4 Hand and Power ToolsUnit 2 Basic MathUnit 5 Fluid MechanicsUnit 3 Precision MeasurementUnit 5 Fluid MechanicsUnit 1 Electrical FundamentalsUnit 1 Electrical FundamentalsUnit 4 Computing PC DatabasesUnit 3 RoboticsUnit 5 InstrumentationUnit 5 InstrumentationUnit 1 Industrial MathUnit 1 Industrial MathUnit 4 Practical Identification of MetalsUnit 2 Chemistry and PhysicsUnit 5 Introduction to MachiningUnit 3 Plant Drawings, Process Controls,Unit 6 Introduction to Welding



- Associate of Science Degree in Industrial Manufacturing Technology
- Technical Competency Area (TCA) in Advanced Manufacturing and Mechatronics
- Technical Competency Area (TCA) in Industrial Maintenance
- Associate of Applied Science Degree in Industrial Maintenance
- Associate of Applied Science Degree in Advanced Manufacturing and Mechatronics
- Bachelor of Science Degree in Engineering Technology



- Central Louisiana Technical Community College (CLTCC) Alexandria, Natchitoches, Many, and Minden
- Louisiana Delta Community College (LDCC) Monroe







- Northwestern State University Natchitoches
  - Bachelor of Science Degree in Engineering Technology



# High Schools Currently Offering C4M



- Caddo Parish Northwood
- Catahoula Parish Block, Central, Harrisonburg, and Sicily Island
  - Desoto Parish Stanley
  - East Carroll Parish General Trass
  - Franklin Parish Wossman
  - Jackson Parish Quitman
  - Lincoln Parish Simsboro

Louisiana Believes

• Morehouse Parish – Bastrop

#### Ouachita Parish –Neville, West Ouachita and Ouachita

- Rapides Parish Buckeye, Tioga, and Bolton
- Sabine Parish Converse
- Union Parish Downsville
- West Carroll Parish Forest, Epps, Oak Grove, and Kilbourne
- Winn Parish Winnfield

# Companies Guaranteeing C4M Completers C Interviews

- ADA Carbon Solutions
- Boise Cascade, Florien
  - Boise Wood Products
  - Bunkie Wood Products
  - Catahoula Manufacturing
  - Cenla Recycling
  - Crest DisTran Industries
  - Eclectic Products

- Emerson/Alliance Compress
- International Paper, Campti
- Ternium
- International Paper, Mansfield
- Kisatchie Treating
- Libbey Inc.
- Paperworks Industries
- Pearson Medical Technologies

#### C4M Salaries For Entry Level Positions



SOC	Description	2016 Jobs	Median Hourly Earnings
47-3013	HelpersElectricians	3,433	\$13.92
47-3015	HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters	2,505	\$13.84
49-9098	HelpersInstallation, Maintenance, and Repair Workers	3,848	\$12.47
51-2092	Team Assemblers	5,151	\$14.98
51-9198	HelpersProduction Workers	5,806	\$13.71
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	43,936	\$11.85
53-7063	Machine Feeders and Offbearers	617	\$17.92

# Companies Guaranteeing C4M Completers C4

- Plastipak
- PQ Corporation
  - Ronpak
  - Roy O. Martin
  - TriState
  - Union Tank Car (UTLX)
  - Advantage Resourcing
  - Ardagh Glass
  - Diversity One Staffing
- Louisiana Believes

- Express Employment Professionals
- International Paper
- Manpower
- Roseburg Frost Products
- Sapa Extrusions
- Steel Fabricators
- Westaff
- Weyerhaeuser



- In 2014 one high school with 44 students enrolled
- In 2017 twenty-six high schools with 846 students enrolled



### **Challenges & Successes**



- Allowing 504 students to enroll in C4M
- Choosing instructors with correct skills
- 31 students have received certification
- 11 will continue their education at technical/community colleges and four-year universities
- 14 aspire to work at different companies
- 4 will join family and friends in pipeline construction industry
- 2 plan to enlist in the Army

How Do I Implement C4M At My School?



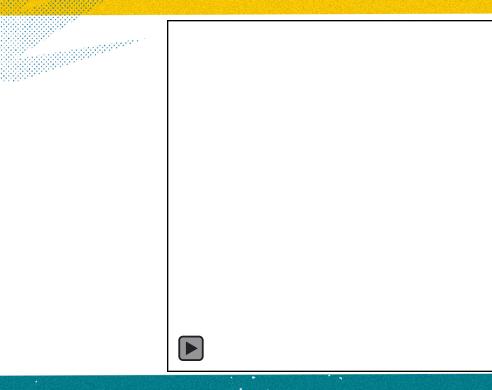
- Set up a meeting with businesses and industries in your region
- Share the C4 Manufacturing Curriculum with them
- Determine if they would hire students with these skills

## **C4M Instructor Certification**



- The LED FastStart Workforce Initiative Team certifies all instructors.
- Instructors must already have the skills needed to teach the curriculum in order to be certified.
- Instructors are certified on how to use the Learning Management System (LMS) where the curriculum is housed, how to navigate using the curriculum, how to help students navigate the LMS, how to use the Interactive Training Modules (ITM), and how to monitor their students' lab work and grades.









#### Contact Linda M. Kelly, Program Manager

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