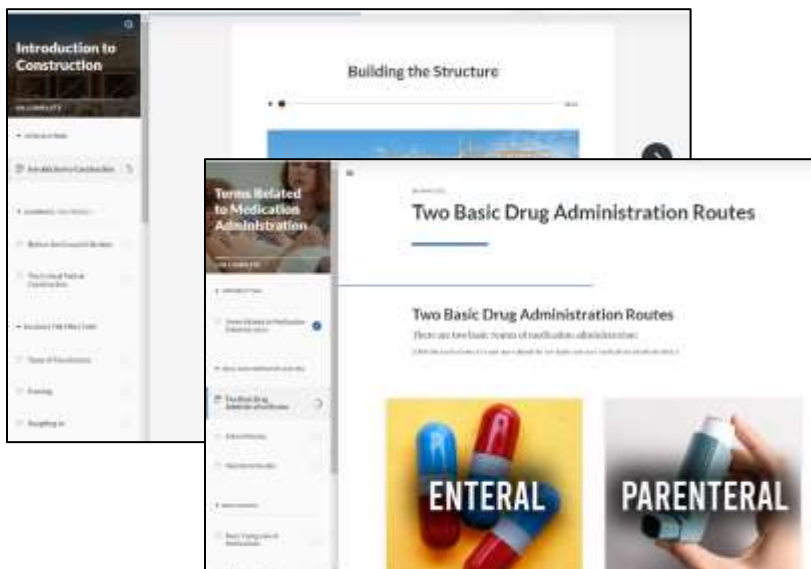# READYFORINDUSTRY

COURSE OUTLINES

Ready for Industry™ (RFI) is a resource that includes 5 self-paced courses that create a bridge between standard education and the knowledge needed to succeed in industry, targeted at late high school, early post-secondary and/or workforce. The 15-20-hour courses address the industries below. Outlines of the courses follow.

- ➢ **Introduction to RFI**
- ➢ **Construction**
- ➢ **Healthcare**
- ➢ **Information Technology**
- ➢ **Logistics**
- ➢ **Manufacturing**

For each of the 5 highest-demand industries, RFI provides self-paced, online instruction on:

- Introduction to the Industry
- What it is like to Work in the Industry
- Industry Terminology and Common Practices
- Workplace Expectations in the Industry
- Career Opportunities and Descriptions
- Current Issues and Trends in the Industry
- Career Pathways, Education, and Certifications in the Industry

RFI prepares individuals for the workplace but is NOT a replacement for technical training.

Introduction to RFI

An Introduction to the Industries
- Overview of Construction
- Overview of Healthcare
- Overview of Information Technology
- Overview of Logistics
- Overview of Manufacturing

For more information or to schedule a free training session, email us at info@ReadyForIndustry.com

READYFORINDUSTRY

Construction

Section 1: Introduction to Construction
- Introduction to Architecture
- Introduction to Construction
- Construction Industry Terminology

Section 2: Working in Construction
- Major Steps in Constructing a House
- Fundamentals of Building Construction
- Standard Operating Procedures for Construction
- Project Management Systems & Software
- OSHA Safety Regulations in Construction
- Construction Site Safety Rules
- Construction Best Practices
- Quality Issues and Defects in Construction

Section 3: Exploring a Career in Construction
- Structural and Civil Engineering Careers
- Construction Site Managers
- Carpenters
- Construction Electricians
- HVAC Technicians
- Construction Plumbers
- Commercial and Residential Painters
- Heavy Equipment Operators, Metal and Ironworkers
- Landscape Architects
- Urban Planners
- Solar and Wind Technicians - Green Technologies

Section 4: Current Issues in Construction
- Lack of Skilled Labor
- Increase in Building Materials Costs
- Increase in Customer Demand
- Regional Construction Issues - Western United States
- Regional Construction Issues - Eastern and Southern United States
- Green Construction
- Energy Conservation
- Urbanization and Smart Communities
- Smart Portfolio Management
- Prefabrication in Construction
- Prefab Logistics, Onsite Installation and Build
- Configuration and Structural Design
- Strategic Sourcing and Procurement

Section 5: Looking for a Career in Construction
- Focusing on the Top Construction Careers
- Education Pathways for Construction Careers
- Writing a Resume for Construction Careers
- Finding a Job in Construction
- Preparing for a Construction Career Interview

Section 6: Workplace Expectations in Construction
- Employer Expectations
- Working as a Team in Construction
- Time Management in Construction
- Self-Management

READYFORINDUSTRY

Healthcare

Section 1: Introduction to Healthcare
- What is Healthcare?
- The Importance of Healthcare to Society
- Where Healthcare Professionals Work
- Major Categories of Healthcare

Section 2: Working in Healthcare
- The Language of Medicine
- Basic Anatomical Terms
- Terms Related to Conditions and Diseases
- Terms Related to Medical Equipment
- Terms Related to Medication Administration
- Terms Related to Medical Procedures
- Terms Related to Patient Status
- Terms Related to Health Insurance
- Basic Medical Abbreviations
- Soft Skills Needed in Healthcare
- Importance of Critical Thinking
- Attention to Detail
- Empathy & Emotional Stability
- Professionalism in Healthcare
- Basic Communication Strategies
- Key Principles in Patient Interactions
- Safety & Infection Control in Healthcare
- Preventing Healthcare Acquired Infections
- Healthcare Privacy (HIPAA)
- Healthcare Quality
- Legal Issues Affecting Healthcare
- Patient Rights
- Medical Ethics

Section 3: Exploring a Career in Healthcare
- Careers in Medicine - Physician
- Careers in Nursing

- Careers in Pharmaceutical Science
- Careers in Clinical/Diagnostic Services
- Careers in Emergency Medical Services
- Careers in Home Health/Hospice
- Careers in Dental Sciences
- Careers in Therapeutics
- Careers in Medical Rehabilitation
- Careers Related to Healthy Lifestyles
- Other Healthcare Fields

Section 4: Current Issues in Healthcare
- Skepticism of the Healthcare Community
- The U.S. Healthcare Insurance System
- Drivers of Healthcare Costs in the U.S.
- Recent Trends in U.S. Mortality Rates
- Prevention of Medical Errors
- Availability of Healthcare in the U.S.
- State of U.S. Public Health Infrastructure
- Workforce Crisis in U.S Healthcare
- Telemedicine in the U.S.

Section 5: Looking for a Career in Healthcare
- Focusing on the Top Healthcare Careers
- Education Pathways for Healthcare Careers
- Writing a Resume for Healthcare Careers
- Finding a Job in Healthcare
- Preparing for a Healthcare Career Interview

Section 6: Workplace Expectations in Healthcare
- Employer Expectations
- Working as a Team in Healthcare
- Goal Setting & Time Management in Healthcare
- Self-Management

READYFORINDUSTRY

Information Technology

Section 1: Introduction to Information Technology
- What is Information Technology?
- The importance of Information Technology in Society
- Common IT Devices and Terminology - Personal Computing
- Common IT Devices and Terminology - Networking, Clouds and the Internet
- Common IT Devices and Terminology - Industrial Computing Applications

Section 2: Working in Information Technology
- IT Architecture in a Company
- Data Backup and Recovery
- Understanding Saas and PaaS vs. Internal Platforms
- User Security Profiles
- Information Security Policies
- Identity Theft Protection
- Cyberattacks and Ransomware
- Security Incident Response Plans
- Software Needs in Business
- Basic Coding Concepts
- Software Development
- Web Development
- Information Security Management Systems

Section 3: Exploring a Career in Information Technology
- Software Developers
- Web Developers
- Data Management
- Cybersecurity
- Hardware Design and Maintenance
- Customer Service and Support

- **Section 4: Current Issues in Information Technology**
- Data Security
- Cloud Computing
- Internet of Things (IoT)
- Data Privacy
- Big Data & Analytics
- Social Media
- Smart Automation Technology
- Software Architecture
- Skills Gaps in IT
- Globalization and E-Commerce
- Virtual Reality & Augmented Reality
- Blockchain Technology
- 3D Printing
- Machine Learning (ML) & Artificial Intelligence (AI)
- Biometrics

Section 5: Looking for a Career in Information Technology
- Focusing on the Top IT Careers
- Education Pathways for IT Careers
- Writing a Resume for IT Careers
- Finding a Job in IT
- Preparing for an IT Career Interview

Section 6: Workplace Expectations in Information Technology
- Employer Expectations
- Working as a Team in IT
- Time Management in IT
- Self-Management

Logistics

Section 1: Introduction to Logistics
- The Logistics Industry and Logistics Management
- The Logistics Industry - Elements of Logistics Management
- The Importance of Transportation, Distribution and Logistics in Society
- Key Logistics Terms
- Concepts of Logistics - Materials Management to Physical Distribution
- Primary Modes of Transportation

Section 2: Working in Logistics
- Working in Transportation: What is a Supply Chain?
- Supply Chain Management
- Life Cycle of a Load
- Types of Logistics Options
- OSHA Requirements for Transportation and Logistics
- Safety Hazards in Logistics
- The Importance of Insuring a Load
- Transportation Risks
- Criminal Activities and Terrorism
- Cybersecurity and Transportation Infrastructures
- Common Quality Issues in Logistics
- Factors to Measure Logistics Service Quality
- Quality Control Programs

Section 3: Exploring a Career in Logistics
- Industrial Truck and Tractor Operators
- Cargo and Freight Agents
- Distribution Workers and Managers
- Distribution Operations Managers
- Stockers and Order Fillers
- Production Planner/Manager

- Warehouse Laborers
- Freight, Stock and Material Movers
- Logisticians
- Logistics Analysts/Engineers
- Supply Chain Manager
- Shipping, Receiving & Inventory Clerks
- Transit Drivers

Section 4: Current Issues in Logistics
- Fleet Costs - Insurance, Fuel & Maintenance
- Driver Shortage & Retention
- Government Regulations – Loads, Weight & Driver Time
- Traffic Management
- Effects of Economic Conditions and Competition
- Automated Supply Chain Processes
- Implementing Technology Strategies
- Self-Driving Trucks and Drones
- Automated Freight Matching
- Vehicle-to-Vehicle Communication
- Remote Diagnosis
- Vehicle-to-Infrastructure Communication

Section 5: Looking for a Career in Logistics
- Focusing on the Top Logistics Careers
- Education Pathways for Logistics Careers
- Writing a Resume for Logistics Careers
- Finding a Job in Logistics
- Preparing for a Logistics Career Interview

Section 6: Workplace Expectations in Logistics
- Employer Expectations
- Working as a Team in Logistics
- Time Management in Logistics
- Self-Management

Manufacturing

Section 1: Introduction to Manufacturing
- Introduction to Manufacturing
- The Importance of Manufacturing in Society
- Manufacturing Careers Overview
- Common Manufacturing Industries
- Common Manufacturing Types
- Manufacturing Processes & Terminology: Forming, Molding, Machining
- Manufacturing Processes & Terminology: Assembly & Finishing
- Manufacturing Processes & Terminology: Continuous Processes

Section 2: Working in Manufacturing
- Three Key Concepts to Production Management
- Common Manufacturing Processes
- Robotics in Manufacturing
- Food Manufacturing
- Working with Perishable Materials
- Fabrication vs. Assembly
- Warehousing in Manufacturing
- Production Planning
- Modern Assembly Lines
- Purchasing and Lead Times
- What is OSHA?
- OSHA Regulations and Hazard Communications
- Common PPE Equipment
- Manufacturing Safety: Ergonomics, Falls, and Respiratory Hazards
- Manufacturing Safety: Lockout/ Tagout, Machine Guards, and Motorized Equipment
- What is Lean Manufacturing?
- What is Six Sigma?
- What is Total Quality Management (TQM)?

Section 3: Exploring a Career in Manufacturing
- Maintenance and Repair Technicians
- Welders
- Machinists

- Manufacturing Painters
- Mechanics
- Testing and Non-Destructive Testing Technicians
- Industrial Electricians
- Plumber and Pipefitters
- Press Technicians
- Robot Operators
- Production & Process Engineers
- Quality Assurance Technicians
- Logistics & Inventory Control Specialists
- Health, Safety & Environmental Control Specialists

Section 4: Current Issues in Manufacturing
- Introduction to Manufacturing Challenges
- Supply Chain Resilience and Smart Factories
- Labor Unions
- Cost Increases & Disruption in Transportation
- Reshoring, Outsourcing, Offshoring
- Green Manufacturing Strategies
- Smart Manufacturing
- Advancements in Manufacturing

Section 5: Looking for a Career in Manufacturing
- Focusing on the Top Manufacturing Careers
- Education Pathways for Manufacturing Careers
- Writing a Resume for Manufacturing Careers
- Finding a Job in Manufacturing
- Preparing for a Manufacturing Career Interview
- Interview Skills

Section 6: Workplace Expectations in Manufacturing
- Employer Expectations
- Working as a Team in Manufacturing
- Time Management in Manufacturing
- Self-Management
- Conflict Resolution
- Personal Development and Lifelong Learning