

MACC Tech Curriculum

PHASE 1 - ADMINISTRATION & SAFETY

COVERAGE		COURSE FORMAT	HRS
<input type="checkbox"/> All	Skills USA Career Essentials or Equivalent	On Own	40
<input type="checkbox"/>	<i>11th grade level</i>		
<input type="checkbox"/> All	Hazardous Communication	Facilitated	8
<input type="checkbox"/>	<i>MSHA Training (Required by the Federal Mine Safety and Health Administration)</i>		
<input type="checkbox"/>	<i>Safety Data Sheet Training</i>		
<input type="checkbox"/>	<i>Safe Materials Handling</i>		
<input type="checkbox"/>	<i>Safe Materials Transport</i>		
<input type="checkbox"/>	<i>Safe Materials Storage</i>		
<input type="checkbox"/>	<i>Materials Disposal</i>		
<input type="checkbox"/>	<i>Basic Chemical Reactions</i>		
<input type="checkbox"/>	<i>Signage (The Globally Harmonized System)</i>		
<input type="checkbox"/>	<i>https://www.osha.gov/dsg/hazcom/global.html</i>		
<input type="checkbox"/>	<i>OSHA Training Tutorial - Understanding the GHS Labeling System</i>		
<input type="checkbox"/> All	First Aid / CPR / AED (alternate years with MSHA- BT/Red Cross administer at beginning of year)	Facilitated	8
<input type="checkbox"/> All	Hazard Awareness (SLAM)	Facilitated	8
<input type="checkbox"/>	<i>SLAM - Stop, Look, Analyze & Manage</i>		
<input type="checkbox"/>	<i>SLAM for Life - MSHA Risk Assessment VIDEO</i>		
<input type="checkbox"/> All	Record Keeping	Facilitated	8
<input type="checkbox"/>	<i>Compliance</i>		
<input type="checkbox"/>	<i>OSHA Regulations</i>		
<input type="checkbox"/>	<i>MSHA Regulations</i>		
<input type="checkbox"/>	<i>Safety Plans</i>		
<input type="checkbox"/>	<i>Check In</i>		
<input type="checkbox"/>	<i>Driver's Logs (DOT Files)</i>		
<input type="checkbox"/>	<i>Environmental (air, water, storm water)</i>		
<input type="checkbox"/>	<i>Quality Control</i>		
<input type="checkbox"/> All	Emergency Response	Facilitated	8
<input type="checkbox"/>	<i>Emergency Plans</i>		
<input type="checkbox"/>	<i>MSHA/OSHA Breakdown</i>		
<input type="checkbox"/>	<i>First Responders Pre-Meetings (know the layout) *bring in resources</i>		
<input type="checkbox"/>	<i>Escort</i>		
<input type="checkbox"/>	<i>SERC Program</i>		
<input type="checkbox"/> Mining	Mine Tour(s)	Facilitated	20
<input type="checkbox"/>	<i>New Miner Training Part 46</i>		
<input type="checkbox"/>	<i>MSHA PPE</i>		
<input type="checkbox"/>	<i>Mine Act</i>		
<input type="checkbox"/>	<i>Site Specific Safety Plan</i>		
<input type="checkbox"/>	<i>Lockout Tagout</i>		
<input type="checkbox"/>	<i>Confined Space</i>		
<input type="checkbox"/>	<i>Task Training</i>		
<input type="checkbox"/> Asphalt	OSHA (Occupational Safety and Health Administration) Training	Facilitated	20
<input type="checkbox"/>	<i><u>OSHA 10 Hour Course</u></i>		

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PHASE 2 – INDUSTRY FOUNDATIONS

COVERAGE		COURSE FORMAT	HRS
<input type="checkbox"/> All	Geology 101 (Ohio Basic) General Geology and Resource availability in Ohio	Facilitated	24
<input type="checkbox"/>	Resources		
<input type="checkbox"/>	Ohio Geological Survey		
<input type="checkbox"/>	What materials are available in OH?		
<input type="checkbox"/>	Why are the materials available?		
<input type="checkbox"/>	What areas are materials available?		
<input type="checkbox"/>	Quality regulations of different materials		
<input type="checkbox"/> Mining	Production Basics - Mining (site visits)	Facilitated	12
<input type="checkbox"/>	Crushers		
<input type="checkbox"/>	Screening		
<input type="checkbox"/>	Sizing		
<input type="checkbox"/>	Conveying		
<input type="checkbox"/>	Handling		
<input type="checkbox"/>	Site Visit		
<input type="checkbox"/>	Industry Videos (FlexCo, Eagle, Screen Machine, Thor)		
<input type="checkbox"/> Asphalt	Production Basics - Asphalt	Facilitated	12
<input type="checkbox"/>	Production Plant Differences		
<input type="checkbox"/>	Differing Plant Processes		
<input type="checkbox"/>	Plant Visit		
<input type="checkbox"/>	Trucking Differences		
<input type="checkbox"/> Concrete	Production Basics - Concrete	Facilitated	12
<input type="checkbox"/>	Site Visit		
<input type="checkbox"/>	Different Mix Design Criteria		
<input type="checkbox"/>	Trucking Differences		
<input type="checkbox"/> All	Environmental Regulations / Permits	Facilitated	8
<input type="checkbox"/>	Permitting		
<input type="checkbox"/>	Record-Keeping		
<input type="checkbox"/>	Maintenance		
<input type="checkbox"/>	Neighbor Relations		
<input type="checkbox"/>	Zoning		
<input type="checkbox"/>	Regulatory Agencies in Each Industry		
<input type="checkbox"/>	Being a Good Neighbor		
<input type="checkbox"/>	OH EPA		
<input type="checkbox"/>	Ohio Geological Survey		
<input type="checkbox"/> Mining	Quality Control OAIMA/ODOT Level 1 (will receive certificate)	Facilitated	8
<input type="checkbox"/>	Intro		
<input type="checkbox"/>	Basic Tests		
<input type="checkbox"/>	Governing Agencies		
<input type="checkbox"/> Asphalt	FPO/ODOT Level 1 (FPO dictates)	Facilitated	8
<input type="checkbox"/>	Intro		
<input type="checkbox"/>	Inspection (qualifications, sampling and testing)		
<input type="checkbox"/>	Equipment		
<input type="checkbox"/>	Record-Keeping		
<input type="checkbox"/>	Materials-Asphalt		
<input type="checkbox"/>	Materials-Aggregate		
<input type="checkbox"/>	Mix Design - Properties and Characteristics		
<input type="checkbox"/>	Asphalt Mix Designs - Marshall Method		
<input type="checkbox"/>	Asphalt Mix Designs - Gyratory Method		
<input type="checkbox"/>	Plant Operations and (site visit)		
<input type="checkbox"/>	Transportation and Placement (site visit)		
<input type="checkbox"/> Concrete	OCC	Facilitated	8
<input type="checkbox"/>	Intro		
<input type="checkbox"/>	Basic Ingredients -(Portland cement, SCM's, water, aggregates and admixtures)		
<input type="checkbox"/>	Chemistry (hydration)		
<input type="checkbox"/>	Properties of Fresh and Hardened Concrete		
<input type="checkbox"/>	Durability and Mix Design Process		
<input type="checkbox"/>	Batching, Mixing, Transporting, Handling of Fresh Concrete (plant visit)		
<input type="checkbox"/>	Plant Types, Safely working with Concrete		
<input type="checkbox"/>	Placement, Finishing and Curing		
<input type="checkbox"/>	Site Preparation, Placement Methods, Finishing, Curing, Jointing Sealing (site visit)		
<input type="checkbox"/>	Reinforcement and Load Transfer Devices		
<input type="checkbox"/>	Hot and Cold Weather Concreting		
<input type="checkbox"/>	Standardized Concrete Testing Procedures (ASTM)		
<input type="checkbox"/> All	Skills USA Career Essentials or Equivalent	On Own	40
<input type="checkbox"/>	12th Grade Level		

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PHASE 3 – MECHANICAL/OPERATIONS/MATERIALS

COVERAGE			COURSE FORMAT	HRS
<input type="checkbox"/>	All	Conveyor Basics - Field or Site Demos with Industry Representatives	Field skills	8
<input type="checkbox"/>		<i>Safety</i>		
<input type="checkbox"/>		<i>Identification</i>		
<input type="checkbox"/>		<i>Operations</i>		
<input type="checkbox"/>	All	Basic Welding / Safety	Field skills	4
<input type="checkbox"/>		<i>Safety</i>		
<input type="checkbox"/>		<i>Identification</i>		
<input type="checkbox"/>		<i>Operations</i>		
<input type="checkbox"/>	All	Cutting Torches	Field skills	4
<input type="checkbox"/>		<i>Safety</i>		
<input type="checkbox"/>		<i>Identification</i>		
<input type="checkbox"/>		<i>Operations</i>		
<input type="checkbox"/>	All	Basic Electrical	Field skills	4
<input type="checkbox"/>		<i>Safety</i>		
<input type="checkbox"/>		<i>Identification</i>		
<input type="checkbox"/>		<i>Operations</i>		
<input type="checkbox"/>	All	Electrical MCC PLC	Field skills	4
<input type="checkbox"/>		<i>Safety</i>		
<input type="checkbox"/>		<i>Identification</i>		
<input type="checkbox"/>		<i>Operations</i>		
<input type="checkbox"/>	All	Screens and Screening Basics - Field or Site Demos	Field skills	8
<input type="checkbox"/>		<i>Safety</i>		
<input type="checkbox"/>		<i>Identification</i>		
<input type="checkbox"/>		<i>Operations</i>		
<input type="checkbox"/>	All	Small Motor troubleshooting	Field skills	4
<input type="checkbox"/>		<i>Safety</i>		
<input type="checkbox"/>		<i>Identification</i>		
<input type="checkbox"/>		<i>Operations</i>		
<input type="checkbox"/>	All	Hydraulics	Field skills	4
<input type="checkbox"/>		<i>Safety</i>		
<input type="checkbox"/>		<i>Identification</i>		
<input type="checkbox"/>		<i>Operations</i>		
<input type="checkbox"/>	All	Mobile Equipment	Field skills	20
<input type="checkbox"/>		<i>Safety</i>		
<input type="checkbox"/>		<i>Identification</i>		
<input type="checkbox"/>		<i>Operations</i>		
<input type="checkbox"/>	All	Transportation - Field and Site Visits	Field skills	20
<input type="checkbox"/>		<i>Introduction to CDL Training (available to eligible students through many Adult Ed. programs)</i>		
<input type="checkbox"/>		<i>Safety</i>		
<input type="checkbox"/>		<i>Identification</i>		
<input type="checkbox"/>		<i>Operations</i>		

PHASE 3 HOURS

80

TOTAL HOURS

332