OSMRE TRAINING

Career
Series
Guide
Matrix

NTTP Course Matrix

Course Name	Regulatory Engineer	AML Engineer	Explosives Engineer	Regulatory Inspector	AML Inspector	Hydrologist Geologist	Natural/ Soil Scientist	Geo-Spatial Mine	Permit Reviewer	Attorney	Program Manager	Admin Support
AFM: Basic Principles and Concepts	1	1	1		1	1	1		1	1		
Advanced Blasting: Investigation and Analysis			2	2								
AML Dangerous Highwalls		1										
AML Dangerous Openings		1										
AML Drilling and Grouting		1										
AML Fires		1										
AML Landslides		1										
AML Subsidence		1										
AML Realty		2			2							
AML Reclamation Projects		1			1						1	
Applied Engineering Principles			1	1	1				1			
Basic Inspection Workbook			1	1			1	1	1	1	1	
Blasting and Inspection	1		1	1	2				2	2		
Bonding: Administrative and Legal Aspects		1										
Bonding: Cost Estimation	1								2			
Coalfield Communications		2	2	2	2	2			2		1	
Effective Writing	1	1	1	1	1	1	1	1	1		1	
Enforcement Procedures	2		2	1				1	1	1		
Erosion and Sediment Control	1	1		1			2		1	2		
Evidence Preparation and Testimony	1	1	1	1	2	2	1	2	1	1	1	
Excess Spoil Handling and Disposal in Steep Slope Topography			2						1			
Expert Witness	2		2			2	2		2	2		
Forensic Hydrologic Investigations						2			2			
Historic and Archeological Resources	2		1		2	2			1			
Instructor Training Course												
Introductions to SMCRA Inspections	1	1	1	1	1	1	1	1	1	1	1	1
Mine Gas Safety and Investigation												
NEPA Fundamentals	2	2					2		1	2	1	
Passive Treatment	2	2				2						
Permitting Hydrology						1			1	2		
Quantitative Hydrogeology	2					1						
SMCRA and ESA	2	2					2		2			
Soils and Revegetation		1		1	1		1		1	1		
Subsidence			2	2					2			
Surface and Groundwater Hydrology	1	1		1	1	1		2	1	1		
Underground Mining Technology	1	1	2	1	1	1		2	1	2		
Wetlands Awareness	2				1	2	2		1			

TIPS Course Matrix -TIPS Provided

Course Name	Regulatory Engineer	AML Engineer	Explosives Engineer	Regulatory Inspector	AML Inspector	Hydrologist Geologist	Natural/ Soil Scientist	Geo- Spatial Mine	Permit Reviewer	Attorney	Program Manager	Admin Support
AMD TREAT: Mine Drainage Treatment Cost Calculations	1	1			1	1						
ArcGIS Spatial Analyst: For Mining and Reclamation	2	2				2		2	2			2
Blasting Log Evaluation Program (BLEP) – Distance Learning				1								
CAD 100: AutoCAD Essentials – Distance Learning				1	1				1			
CAD 101: AutoCAD for Permitting and Reclamation				1	1				1			
CAD 200: AutoCAD Map 3D for Permitting and Reclamation				2	2				2			
CAD 201: Carlson Mining Site Design – Permitting and Reclamation				2	2				2			
CAD 300: AutoCAD Map 3D with Raster Design for Underground and Surface Mine Mapping									3			
CAD 301: Carlson Mining, Field, Hydrology, and Natural Regrade for Permitting and Reclamation				3	3	3			3			
CAD 400: Bridging the CAD and GIS Gap in the SMCRA Window				1	1				1			
Galena Slope Stability Analysis – Distance Learning	1					1			1			
HEC-RAS	1					1						
Introduction to Earth.Vision 2D and 3D Modeling						1			1			
Introduction to GIS for Mining and Reclamation I – Distance Learning	1			1	1				1			
Introduction to GIS for Mining and Reclamation I				1	1				1			
Modeling and Analysis with Groundwater Vistas				1		1						
SDPS: Surface Deformation Prediction System – Distance Learning				1								
SEDCAD Applications and Extensions for Mining and Reclamation				1		1						
Testing and Analysis of Aquifer Characteristics with AQTESOLV				1		1						

TIPS Course Matrix – Vendor Provided

Course Name	Regulatory Engineer	AML Engineer	Explosives Engineer	Regulatory Inspector	AML Inspector	Hydrologist Geologist	Natural/ Soil Scientist	Geo- Spatial Mine	Permit Reviewer	Attorney	Program Manager	Admin Support
BlueMarble - Introduction to Global Mapper	1	1	1	1	1	1	1	1	1			
BlueMarble - Raster & Terrain Analysis in Global Mapper	1	1	1	1	1	1	1	1	1			
BlueMarble - Lidar & Point Cloud Processing in Global Mapper	1	1	1	1	1	1	1	1	1			
BlueMarble - Working with LiDAR ArcGIS				1	1				1			
CADD - AutoCAD Essentials	1	1	1	1	1	1	1	1	1			
CADD - AutoCAD II Beyond the Basics	2	2	2	2	2	2	2	2	2			
CADD AutoCAD Map 3D & AutoCAD Raster	1	1	1	1	1	1	1	1	1			
ESRI - ArcGIS Online: Essential Workflow	1	1				1	1	1	1			
ESRI – Field Data Collection and Management with ArcGIS				1	1							
ESRI - Migrating from ArcMap to ArcGIS Pro	1	1				1	1	1	1			
ESRI - ArcGIS Pro: Essential Workflows	2	2				2	2	2	2			
ESRI - Creating and Editing Data with ArcGIS Pro	2	2				2	2	2	2			
ESRI - Spatial Analysis with ArcGIS Pro	2	2				2	2	2	2			
ESRI - Arc Hydro: GIS for Water Resources	1	1				1	1	1	1			
ESRI - Sharing Content to ArcGIS Enterprise	1	1				1	1	1	1			
ESRI - Hydrologic and Hydraulic Analysis Using ArcGIS	1	1				1	1	1	1			
ESRI - Imagery Analysis in ArcGIS Pro	2	2				2	2	2	2			
ESRI - Working with Parcel Data in ArcGIS Pro	2	2				2	2	2	2			
ESRI - Creating Python Scripts for ArcGIS Pro	2	2				2	2	2	2			
ESRI - Creating Story Maps with ArcGIS	1	1		1	1	1	1	1	1			
ESRI - Managing Geospatial Data with ArcGIS Pro	2	2				2	2	2	2			