ANEXO N° 1

REQUISITOS TÉCNICOS MÍNIMOS

1. OBJETO A CONTRATAR

Prestar los servicios de capacitación certificada en productos Oracle y Microsoft para los funcionarios de la ANM.

2. CUADRO DE CANTIDADES

ITEM	DESCRIPCIÓN	INTENSIDAD HORARIA MÍNIMA	CANTIDAD DE CUPOS (PERSONAS)	CUMPLE	NO CUMPLE
1	Curso de capacitación: Oracle Weblogic Server 12c: Administration I + Voucher *	40 HORAS	1	**Cumple**	
2	Curso de capacitación WS-011T00-A Windows Server 2019 Administration + Voucher *	40 HORAS	5	**Cumple**	

* Voucher entiéndase como: realizar el pago e Inscribir al alumno ante la plataforma de Oracle, o Microsoft según corresponda para presentar el examen de certificación, con por lo menos 1 intento.

3. CLASIFICADOR UNSPSC

CÓDIGO UNSPSC	SEGMENTO	FAMILIA	CLASE
80111500	Servicios de Gestión, Servicios Profesionales de Empresa y Servicios Administrativos	Servicios de recursos humanos	Desarrollo de recursos humanos

4. CONDICIONES MÍNIMAS DE FUNCIONALIDAD

4.1. Contenido mínimo

ITEM	DESCRIPCIÓN	CONTENIDO MÍNIMO

1	Curso de capacitación: Oracle Weblogic Server 12c: Administration I + Voucher	A partir de lo indicado en https://education.oracle.com/oracle-weblogic-server-12c-administration-i/courP_3175, cito “ • Install, configure, and administer Oracle WebLogic Server • Monitor domain resources • Deploy applications • Create a domain • Start servers • Monitor domain resources • Set up and use node manager • Deploy applications • Deploy share libraries and associated applications • Configure database resources • Configure a cluster” Temas: Cito **“** **WebLogic Server Overview** • WebLogic Server Architecture • Application Services • Administration Tools • Java Cloud Service **Installing and Patching WebLogic Server** • Installing WebLogic Server • Patching WebLogic Server • Zero Downtime Patching **Creating Domains** • Domain Planning • Domain Modes • Domain Creation Tools • Domain Templates • Using the Configuration Wizard • Multitenancy concepts **Starting Servers** • Server Lifecycle • Starting and Stopping Servers

		• Domain scripts • Customizing Domain Scripts • Restarting Failed Servers **Using the Administration Console** • Using the Administration Console for Configuration • Change Management Architecture • Creating and Modifying Managed Servers • Enterprise Manager Cloud Control **Configuring JDBC** • JDBC Review • Datasource Types • Configuring a JDBC Data Source • JDBC and RAC • Connection Pools **Monitoring a Domain** • Working with WebLogic Server Logs • Monitoring WebLogic Server • JMX, MBeans and Monitoring • Monitoring Dashboards **Node Manager** • Node Manager Concepts • Configuring and Using Node Manager • Node Manager Setup Tasks • Node Manager and Scripting • Node Manager Best Practices **Deploying Applications** • Deployment Overview and Lifecycle • Deployment Descriptor Concepts • WebLogic Deployment Tools • Deploying an Application • Load Testing an Application **(Ed 3 ILT & LVC only, coming in March 2020) Shared Java EE Libraries** • Shared Java EE Library Concepts • Deploying a Shared Library **Network Channels and Virtual Hosts**

		• Configuring a Network Channel • Configuring the Admin Port • Creating a Virtual Host **Clusters: Overview, Create, & Config** • Clustering Review • Configuring a Cluster • Configuring a Dynamic Cluster **Clusters: Proxies & Sessions** • Web-tier and Cluster Proxies • Oracle Traffic Director and Oracle HTTP Server • Configuring a Cluster Proxy • Configuring Replication Groups **Clusters: Communication, Planning & Troubleshooting** • Cluster Communication Concepts • Multicast and Unicast • Replication Channels • Scaling and Troubleshooting Clusters **Transactions** • Transaction Overview • Configuring Transaction Persistence • Transaction Logs • Transactions and Persistent Stores • Monitoring Transactions **WebLogic Server Security** • WebLogic Security Architecture • Configuring an Authentication Provider • LDAP Authentication • Troubleshooting Authentication **Backing Up a Domain and Upgrading WebLogic Server** • Backup/Recovery Concepts • Backup Types Backing Up and Restoring a Domain”
		El contratista deberá: • Realizar todas las gestiones pertinentes para inscribir al alumno ante la plataforma de Oracle para presentar el examen de certificación. • Deberá realizar el pago completo del valor del voucher

2	Curso de capacitación WS-011T00-A Windows Server 2019 Administration	A partir de lo indicado en https://docs.microsoft.com/en-us/learn/certifications/courses/ws-011t00, cito “ **Course outline** **Module 1: Windows Server Administration Overview** This module describes how to distinguish different Windows Server 2019 editions and techniques for deployment, servicing and activation. The module also introduces Windows Server Core and compares it with the Desktop Experience version. The module describes tools and concepts for adminstering Windows Server, such as Windows Admin Center, PowerShell, and delegation of privileges. **Lessons** • Introducing Windows Server 2019 • Windows Server Core Overview • Windows Server administration principles and tools overview **Lab: Deploying and configuring Windows Server** • Deploying and configuring Server Core • Implementing and using remote server administration After completing this module, students will be able to: • Describe Windows Server as well as techniques for deployment, servicing and activation. • Describe Windows Server Core, its specifics and ways to administer it. **Module 2: Identity Services in Windows Server** This module introduces identity services and describes Active Directory Domain Services (AD DS) in a Windows Server environment. The module describes how to deploy domain controllers in AD DS, as well as the Azure Active Directory (AD) and the benefits of integrating Azure AD with AD DS. The module also covers Group Policy basics and how to configure group policy objects (GPOs) in a domain environment. Finally, the modules describes the role of Active Directory certificate services and certificate usage. **Lessons** • AD DS Overview • Deploying Windows Server domain controllers

		• Azure AD overview • Implementing Group Policy • Active Directory Certificate Services overview **Lab: Implementing Identity Services and Group Policy** • Deploying new domain controller on Server Core • Configuring Group Policy • Deploying and using certificate services • Explain Group Policy basics and configure GPOs in a domain environment • Describe the role of Active Directory certificate services and certificate usage After completing this module, students will be able to: • Describe AD DS in a Windows Server environment. • Deploy domain controllers in AD DS. • Describe Azure AD and benefits of integrating Azure AD with AD DS. **Module 3: Network Infrastructure services in Windows Server** This module describes how to implement core network infrastructure services in Windows Server. The modules covers how to deploy, configure and manage DNS and IPAM. The modules also describes how to use Remote Access Services. **Lessons** • Deploying and managing DHCP • Deploying and managing DNS service • Deploying and managing IPAM • Remote Access Services in Windows Server **Lab : Implementing and configuring network infrastructure services in Windows Server** • Deploying and configuring DHCP • Deploying and configuring DNS • Implementing Web Application Proxy After completing this module, students will be able to: • Describe, deploy and configure DHCP service. • Deploy, configure and manage DNS. • Describe, deploy and manage IPAM.

		Module 4: File Servers and Storage management in Windows Server This modules describes how to configure file servers and storage in Windows Server. The module covers file sharing and deployment of Storage Spaces technology. The module describes how to implement data deduplication, iSCSI based storage in Windows Server, and finally, how to deploy DFS. **Lessons** • Volumes and File Systems in Windows Server • Implementing sharing in Windows Server • Implementing Storage Spaces in Windows Server • Implementing Data Deduplication • Implementing iSCSI • Deploying Distributed File System **Lab : Implementing storage solutions in Windows Server** • Implementing Data Deduplication • Configuring iSCSI storage • Configuring redundant storage spaces • Implementing Storage Spaces Direct After completing this module, students will be able to: • Implement sharing in Windows Server • Deploy Storage Spaces technology • Implement the data deduplication feature • Implement iSCSI based storage • Deploy and manage Distributed File System (DFS) **Module 5: Hyper-V virtualization and containers in Windows Server** This modules describes how to implement and configure Hyper-V VMs and containers. The module covers key features of Hyper-V in Windows Server, describes VM settings, and how to configure VMs in Hyper-V. The module also covers security technologies used with virtualization, such as shielded VMs, Host Guardian Service, admin-trusted and TPM-trusted attestation, and KPS.

		Lessons • Hyper-V in Windows Server • Configuring VMs • Securing virtualization in Windows Server • Containers in Windows Server • Overview of Kubernetes **Lab : Implementing and configuring virtualization in Windows Server** • Creating and configuring VMs • Installing and configuring containers After completing this module, students will be able to: • Describe the key features of Hyper-V in Windows Server. • Describe VM settings and deploy and configure VMs in Hyper-V. • Explain the use of security technologies for virtualization. • Describe and deploy containers in Windows Server. • Explain the use of Kubernetes on Windows. **Module 6: High Availablity in Windows Server** This module describes current high availability technologies in Windows Server. The module describes failover clustering and considerations for implementing it, and how to create and configure failover clustering. The module also explains stretch clusters and options for achieving high availability with Hyper-V VMs. **Lessons** • Planning for failover clustering implementation • Creating and configuring failover cluster • Overview of stretch clusters • High availability and disaster recovery solutions with Hyper-V VMs **Lab : Implementing failover clustering** • Configuring storage and creating a cluster • Deploying and configuring a highly available file server • Validating the deployment of the highly available file server After completing this module, students will be able to:

		• Describe failover clustering and the considerations for implementing it. • Create and configure failover clusters. • Describe stretch clusters. • Describe options to achieve high availability with Hyper-V VMs. **Module 7: Disaster recovery in Windows Server** This module describes disaster recovery technologies in Windows Server and how to implement them. The module covers how to configure and use Hyper-V Replica and describes Azure Site Recovery. The module also covers how to implement Windows Server backup and describes the Azure Backup service. **Lessons** • Hyper-V Replica • Backup and restore infrastructure in Windows Server **Lab : Implementing Hyper-V Replica and Windows Server Backup** • Implementing Hyper-V Replica • Implementing backup and restore with Windows Server Backup After completing this module, students will be able to: • Describe and implement Hyper-V Replica. • Describe Azure Site Recovery. • Describe and implement Windows Server backup. • Describe the Azure Backup service. **Module 8: Windows Server security** This module describes Windows Server security features and how to implement them. The module covers credentials used in Windows Server and explains how to implement privileged access protection. In addition to describing methods and technologies for hardening Windows Server security, the module explains how to configure Just Enough Administration (JEA) and how to secure SMB traffic. Finally, the module covers Windows Update, its deployment and management options. **Lessons**

		• Credentials and privileged access protection • Hardening Windows Server • JEA in Windows Server • Securing and analyzing SMB traffic • Windows Server update management **Lab : Configuring security in Windows Server** • Configuring Windows Defender Credential Guard • Locating problematic accounts • Implementing LAPS After completing this module, students will be able to: • Describe credentials used in Windows Server. • Explain how to implement privileged access protection. • Describe methods and technologies to harden security in Windows Server. • Describe and configure Just Enough Administration (JEA). • Secure SMB traffic in Windows Server. • Describe Windows Update and its deployment and management options. **Module 9: RDS in Windows Server** This module describes key Remote Desktop Protocol (RDP) and Virtual Desktop Infrastructure (VDI) features in Windows Server. The modules covers how to deploy session-based desktops and describes personal and poled virtual desktops. **Lessons** • Overview of RDS • Configuring a session-based desktop deployment • Overview of personal and pooled virtual desktops **Lab : Implementing RDS in Windows Server** • Implementing RDS • Configuring Session Collection Settings and using RDC • Configuring a virtual desktop template After completing this module, students will be able to: • Describe Remote Desktop Services (RDS) in Windows Server.

		• Describe and deploy session-based desktops. • Describe personal and pooled virtual desktops. **Module 10: Remote access and web services in Windows Server** This module describes how to implement virtual private networks (VPNs), Network Policy Server (NPS), and Microsoft Internet Information Services (IIS). The module describes Always On VPN functionality, as well as how to configure NPS and Web Server (IIS) in Windows Server. **Lessons** • Implementing VPNs • Implementing Always On VPN • Implementing NPS • Implementing Web Server in Windows Server **Lab : Deploying network workloads** • Implementing VPN in Windows Server • Deploying and Configuring Web Server After completing this module, students will be able to: • Describe VPN options in Windows Server. • Describe Always On VPN functionality. • Describe and configure NPS. • Describe and configure Web Server (IIS). **Module 11: Server and performance monitoring in Windows Server** This module describes how to implement service and performance monitoring, and apply troubleshooting in Windows Server. The module highlights monitoring tools and describes how to monitor performance, including event logging and how to perform event logging monitoring for troubleshooting purposes. **Lessons** • Overview of Windows Server monitoring tools • Using Performance Monitor • Monitoring event logs for troubleshooting **Lab : Monitoring and troubleshooting Windows Server** • Establishing a performance baseline

		• Identifying the source of a performance problem • Identifying the source of a performance problem Identifying the source of a performance problem • Describe monitoring tools in Windows Server. • Describe performance monitoring and use it in Windows Server. • Describe event logging and perform event logging monitoring for troubleshooting purposes. **Module 12: Upgrade and migration in Windows Server** This module describes how to perform upgrades and migrations for AD DS, Storage, and Windows Server. The module covers tools to use for AD DS migration. The module also covers the Storage Migration Service, and finally, Windows Server migration tools and usage scenarios. **Lessons** • AD DS migration • Storage Migration Service • Windows Server migration tools **Lab : Migrating Server workloads** • Implementing Storage Migration Service After completing this module, students will be able to: • Describe tools to use for AD DS migration. • Describe the Storage Migration Service. • Describe Windows Server migration tools and their usage scenarios.
		El contratista deberá: • Realizar todas las gestiones pertinentes para inscribir a los alumnos ante la plataforma de Microsoft para presentar el examen de certificación. • Deberá realizar el pago completo del valor del voucher.

4.2. Metodología

4.2.1. El proveedor debe presentar un cronograma con las opciones de horarios de cursos de capacitación (incluyendo horarios) para ser evaluado por la supervisión del contrato y este elija las fechas.

4.2.2. Los cursos de capacitación deben desarrollarse de forma teórico – práctica.
4.2.3. En caso de interrupción de (los) curso de capacitación (es) este (os), debidamente justificada por cualquiera de las partes, el curso deberá reprogramarse previo acuerdo con el supervisor.
4.2.4. Los cursos de capacitación deben estar orientados tanto a cubrir el contenido temático como a la preparación del examen de certificación (uso del voucher).
4.2.5. Realizar todas las gestiones pertinentes para inscribir a los alumnos ante la plataforma de Microsoft para presentar el examen de certificación.
4.2.6. Realizar todas las gestiones pertinentes para inscribir al alumno ante la plataforma de Oracle para presentar el examen de certificación.
4.2.7. Deberá realizar el pago completo del valor del voucher.
4.2.8. Cada curso de capacitación debe incluir un voucher para el examen de certificación de por lo menos 1 intento.
4.2.9. Cada curso debe ser dispuesto de forma virtual 100%.

4.3. Infraestructura Física y Lógica (licenciamiento)

4.3.1. El proveedor debe contar con las instalaciones adecuadas para los cursos de capacitación (para alojar máquinas físicas o virtuales, acceso a internet, canales a voz y datos, entre otros).
4.3.2. El proveedor deberá suministrar acceso a las máquinas virtual (físicas o Virtuales), para el desarrollo cada curso de capacitación con todo el software base (Sistema Operativo, utilitarios y herramientas) necesario así como con los instaladores requeridos previamente descargados, forma segura (VPN, conexión remota, entre otros).
4.3.3. El proveedor debe contar con la todo el licenciamiento legal necesario y usado en los cursos de capacitación.

4.4. Materiales y elementos

4.4.1. Los cursos de capacitación deben ser dictados en idioma Español.
4.4.2. Todo el material debe ser suministrado en inglés y en medio digital.
4.4.3. El contratista deberá entregará todos los elementos complementarios requeridos para el curso de capacitación (permisos de accesos, esferos, lápices, agenda, entre otros) y ser suministrado a cada estudiante previo al inicio de cada curso de capacitación.
4.4.4. El contratista deberá llevar planillas de asistencia a cada uno de los cursos de capacitación para seguimiento.
4.4.5. Entregar a la ANM copia de las asistencias a cada curso de capacitación.
4.4.6. Entregar a cada estudiante del curso de constancia de participación.
4.4.7. La constancia de participación debe incluir:
4.4.7.1. Nombre del Curso de capacitación
4.4.7.2. Nombre y cédula del Alumno
4.4.7.3. Fecha de Inicio y Finalización del curso de capacitación

4.4.7.4. Duración del curso de capacitación (Intensidad Horaria)
Nota: La constancia de participación a cada alumno, se entregará siempre y cuando el alumno haya cumplido con por lo menos el 80% de la intensidad horaria establecida.

4.4.8. El contratista deberá realizar el pago y la respectiva inscripción para la presentación del examen de certificación (ante Microsoft u Oracle según corresponda) a cada alumno e informar al supervisor del contrato de dicho pago.

4.4.9. El contratista deberá asegurar y proveer todas las medidas establecidas en los protocolos por el gobierno nacional a fin de evitar el contagio del COVID-19.

4.5. Docentes

4.5.1. El proveedor debe contar con el personal idóneo para brindar las capacitaciones, quienes deberán cumplir:

4.5.1.1. Cada docente según corresponda debe contar con Certificado vigente del curso a dictar expedido ya sea por Microsoft (Windows Server 2019 Administration o Administration o (20740C: Installation, Storage, and Compute with Windows Server 2016 y 20741B: Networking with Windows Server 2016) u Oracle (Oracle Certified Professional) según corresponda al curso a dictar.

4.5.1.2. Experiencia efectiva en impartir el curso de capacitación certificados incluidos en este proceso, así:

4.5.1.2.1. Oracle Weblogic Server 12c: Administration I

4.5.1.2.2. WS-011T00-A Windows Server 2019 Administration o (20740C: Installation, Storage, and Compute with Windows Server 2016 y 20741B: Networking with Windows Server 2016)

4.6. Simulacros

4.6.1. El proveedor debe entregar las credenciales de acceso a módulos de entrenamiento (simulacros) previo a la presentación del examen de certificación.

4.6.2. El entorno para los simulacros deben ser web.

CONOCEMOS, ACEPTAMOS Y NOS COMPROMETEMOS A CUMPLIR CON TODOS LOS REQUERIMIENTOS MÍNIMOS OBLIGATORIOS ESTABLECIDOS EN ESTA FICHA TÉCNICA LOS CUALES SE ENTENDERÁN COMO OFERTA TÉCNICA MÍNIMA.

FIRMA DEL OFERENTE: _____
NOMBRE DEL OFERENTE: _____
NOMBRE DE LA EMPRESA OFERENTE: _____

ANEXO 2
FORMATO DE PROPUESTA ECONÓMICA

Señores
AGENCIA NACIONAL DE MINERÍA
Bogotá, D.C.

REFERENCIA: PROCESO DE MÍNIMA CUANTÍA - 2020

A continuación, presentamos el cuadro de oferta económica del presente proceso, cuyo objeto es "Prestar los servicios de capacitación certificada en productos Oracle y Microsoft para los funcionarios de la ANM.":

AGENCIA NACIONAL DE MINERÍA	
PRESTAR LOS SERVICIOS DE CAPACITACIÓN CERTIFICADA EN PRODUCTOS ORACLE Y MICROSOFT PARA LOS FUNCIONARIOS DE LA ANM..	
OFERTA ECONÓMICA	
OFERENTE	**BusinessMind Colombia sa**
DIRECCIÓN	**Cra 45ª No. 93 – 77**
NIT	**900.105.979 - 1**
CONTACTO	**Sandra Lopez**
TEL.: FIJO / CELULAR	**3176689110**

ITEM	DESCRIPCIÓN	INTENSIDAD HORARIA MÍNIMA	CANTIDAD	VALOR UNITARIO IVA INCLUIDO	VALOR TOTAL IVA INCLUIDO
1	Curso de capacitación: Oracle Weblogic Server 12c: Administration I + Voucher*	40 HORAS	1	**5.558.133**	**5.558.133**
2	Curso de capacitación WS-011T00-A Windows Server 2019 Administration + Voucher*	40 HORAS	5	**3.808.000**	**19.040.000**
VALOR TOTAL DE LA PROPUESTA					**24.598.133**

* Voucher entiéndase como: realizar el pago e Inscribir al alumno ante la plataforma de Oracle, o Microsoft según corresponda para presentar el examen de certificación, con por lo menos 1 intento.

CONOCEMOS, ACEPTAMOS Y NOS COMPROMETEMOS A CUMPLIR CON TODOS LOS REQUERIMIENTOS MÍNIMOS OBLIGATORIOS ESTABLECIDOS EN ESTA FICHA TÉCNICA LOS CUALES SE ENTENDERÁN COMO OFERTA TÉCNICA MÍNIMA.

FIRMA DEL OFERENTE: _____
NOMBRE DEL OFERENTE: María Cristina Gonzalez
NOMBRE DE LA EMPRESA OFERENTE: BusinessMind Colombia SA