A **Master's in Cloud Computing** is a specialized postgraduate program Droit Academy focuses on the design, development, and management of cloud-based solutions. This degree aims to provide students with both theoretical knowledge and practical skills in cloud technologies, including cloud infrastructure, cloud architecture, security, and cloud-based application development.

1. Core Areas of Study-Introduction

- **Cloud Infrastructure and Architecture:** Understanding cloud service models (IaaS, PaaS, SaaS), deployment models (public, private, hybrid), and cloud architecture design.
- **Cloud Platforms and Services:** Proficiency in major cloud platforms like AWS (Amazon Web Services), Microsoft Azure, and Google Cloud Platform (GCP).
- **Virtualization and Containerization:** Techniques such as virtualization (VMware, Hyper-V) and containerization (Docker, Kubernetes) for efficient resource management.
- **Cloud Security:** Focus on security principles, data protection, compliance, and identity management in the cloud.
- **DevOps and Automation:** Implementing continuous integration/continuous deployment (CI/CD) pipelines, infrastructure as code (IaC), and automation tools (Ansible, Terraform).
- **Big Data and Cloud Analytics:** Utilizing cloud services for big data storage, processing, and analytics (e.g., AWS Redshift, Google BigQuery).
- **Edge Computing and IoT:** Exploring the integration of cloud services with edge devices and the Internet of Things (IoT).

2. Skills Developed

- **Cloud Architecture Design:** Building scalable, reliable, and cost-effective cloud solutions.
- **Technical Proficiency:** Hands-on experience with cloud platforms (AWS, Azure, GCP) and tools (Terraform, Jenkins, Docker).
- **Security Best Practices:** Implementing robust security measures in a cloud environment.
- **Problem-Solving:** Analyzing complex business requirements and translating them into cloud-based solutions.
- **Project Management:** Understanding cloud migration strategies, cost optimization, and disaster recovery.

3. Specialisation in Cloud: -(Anyone need to choose by students)

- Cloud Computing Fundamentals
- Cloud Infrastructure and Services
- Cloud Security and Compliance
- Cloud Application Development
- DevOps and Cloud Automation
- Big Data and Cloud Analytics
- Edge Computing and IoT Integration

4. Certifications

We will prepare students for industry-recognized cloud certifications, such as**:(Optional for any certification)**

- **AWS Certified Solutions Architect**
- **Microsoft Azure Solutions Architect Expert**
- **Google Cloud Professional Cloud Architect**
- **Certified Kubernetes Administrator (CKA)**

5. Career Opportunities

Graduates with a Master's in Cloud Computing can pursue a variety of roles, including:

- **Cloud Solutions Architect**
- **Cloud Engineer**
- **DevOps Engineer**
- **Cloud Security Specialist**
- **Cloud Consultant**
- **Site Reliability Engineer (SRE)**
- **Cloud Product Manager**