

## Beginning DevOps with Docker

**Duration: 1 Day    Course Code: LO035409    Delivery Method: Virtual Learning**

---

### Overview:

This is a 1-day course packaged with the perfect balance of theory and hands-on activities that will help you learn Docker from scratch.

This course complies with instructional designing principles for all the 3 lessons. This will ensure that you repeat and reinforce your gained knowledge at every step. Each and every minute spent during this 1-day course will incrementally take you to the next level.

### Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

---

### Target Audience:

The course is crafted for developers, system architects, junior and mid-level site reliability engineers interested in adopting a Docker workflow. They are also required to have a basic knowledge of UNIX concepts such as ssh, ports and logs.

---

### Objectives:

- If you are interested in gaining a good grasp of Docker in a systematic and hands-on way by working through a real-world project, then this course is for you.
  - The course will provide enough knowledge of the following:
    - Docker and DevOps, why and how they integrate
    - What containers are, how to create and manage them
    - Scaling a delivery pipeline and multiple deployments with Docker
    - Orchestration and delivery of containerized applications
- 

### Prerequisites:

#### Hardware:

- For successful completion of this course, students will require computer systems with the following:

Processor: 1.8 GHz or higher (Core 2 Duo and above)

- Memory: Minimum 2 GB RAM
- Hard Disk: Minimum 10 GB
- Operating System: Windows 10
- Projector
- Internet connection

#### Software:

- Browser: Google Chrome or Mozilla Firefox (Latest updates installed)
  - Docker Community Edition 17.12
-

## Content:

### Course Outline

#### Lesson 1: Images and Containers

- How Docker Improves a DevOps Workflow
- Basic Docker Terminal Commands
- Dockerfile Syntax
- Building Images
- Running Containers From Images
- Versioning Images and Docker Hub
- Deploying a Docker Image to Docker Hub

#### Lesson 2: Application Container Management

- The docker-compose Tool
- Overview of a Multi-Container Application Setup
- Managing Multiple Containers and Distributed Application Bundles
- Networking with docker-compose

#### Lesson 3: Orchestration and Delivery

- An Overview of Docker Swarm
- Using Docker Engine to Create a Swarm
- Managing Services and Applications in a Swarm
- Scaling Services Up and Down

---

## Additional Information:

### Installation and Setup

Before you start with this course, we'll install Docker Community Edition 17.12. Here, you will find the steps to install these.

### Installing Docker Community Edition 17.12

Visit the Docker Toolbox page below: [https://docs.docker.com/toolbox/toolbox\\_install\\_windows/in](https://docs.docker.com/toolbox/toolbox_install_windows/in) your browserClick the installer link to download.Install Docker Toolbox by double-clicking the installer.Press Next to accept all the defaults and then Install.

---

## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

[info@globalknowledge.co.uk](mailto:info@globalknowledge.co.uk)

[www.globalknowledge.com/en-gb/](http://www.globalknowledge.com/en-gb/)

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK