

tutorrio

Learning programs at a glance

tutorrio

powered by Klarrio

tutorrio is a **data engineering learning space** with **hands-on programs** that meets society's and industry's needs.

It's an **initiative** of **Klarrio** born out of our belief that there must be people who have the capabilities to become a software and data engineer but for whatever reason didn't get the chance.

With this initiative we want to remove all classic obstacles and **offer** people that **possibility independent** of their **background**. Whether you just left high school, university or are already working for some years, if you're sincerely **interested** in **software and data engineering and** have the **basic skills**, you're **welcome**.

Our mission

Offer “**earn while you learn**” **programs** to those who have the intrinsic skills to become proficient **data engineers** but **didn't get the** learning **opportunity**.

Design **programs** that meet society's and industry's need for **skilled data engineers** and goes **beyond** pure **technology**: it builds on our belief in **open-source** while addressing **cloud economics** and **data ethics**.

Prepare students to have all the skills on board to get started as a **member** of the **Klarrio R&D data engineering team on successful completion** of the data engineering program.

The concept

Our **learning programs** are designed to build a robust foundation **in software and data engineering** through a unique combination of **on-site courses** instructed by our experts, **self-study, group assignments** and **certified training**.

Program 1: From Zero to Hero *(not in 2025)*

9 months

Part-1:

Computer science fundamentals

5 months

- A brief history of computers, the UNIX operating system, Git and Go.
- GNU/Linux, shell and common tools
- Programming101
- The Go programming language
- Operating system concepts
- Computer networks: PPP, Ethernet, TCP/IP reference model, ...
- Impact of computing

Part-2:

Data engineering

4 months

On successful completion of Program 1 you will be automatically enrolled in Program 2: Data Engineering.

You're eligible when:

- You successfully graduated a STEM education and have an aptitude for technical subjects
- You can demonstrate your interest in Software Engineering
- You don't mind self-study
- You live in Belgium within +- 45 km radius around Antwerp.
- You hold a Belgian or EU Schengen zone passport.
- You're fluent in English.

Program 2: Data Engineering for Computer Scientists

4 months

Data engineering

4 months

- The Go Programming Language
- Building a Reliable, Scalable, and Maintainable application in Go
- Monitoring and observing an application with OpenTelemetry
- Containerizing an application with Podman
- Orchestrating containers with Kubernetes
- NoSQL Databases, Block Storage, Object Storage, ...
- Cloud-Native and Hybrid Offerings: e.g., AWS, Exoscale, On-Prem, ...
- Event Frameworks: e.g., MQTT, Apache Kafka, ...
- Cloud Economics
- Data Security

You're eligible when:

- You successfully obtained your Bachelor's or Master's degree in Computer Science:
 - You have experience with Linux
 - You have experience with version control (git)
 - You have some basic experience with shell scripting
 - You can demonstrate your programming skills
 - You know about operating system concepts (processes, threads, scheduling, memory management, IO)
 - You are familiar with the different network layers.
- You don't mind self-study
- You live in Belgium within +- 45 km radius around Antwerp.
- You hold a Belgian or EU Schengen zone passport.
- You're fluent in English.

Our conditions

- You are **eligible to work** in the **EU**
- You can **commit to 9 months 5-days/week full-time**
 - **3 days** required presence **in our lab** in Antwerp
 - **2 days** from **home or our lab**, you choose
- You have a **broadband connection** to work @home
- Upon **successful completion** of the program:
 - You are willing to continue to **work for Klarrio** for at least **18 months** or compensate Klarrio as defined in the "*training stipulation*" by the Belgian federal government.
 - You will receive **an updated competitive remuneration package** in line with Klarrio's data engineer package.

What are we looking for

personal competences

Operational

Accuracy or you'll make all sorts of stupid coding mistakes.

Concern about **quality** (*maintainability, testability, readability, security*) in order to write good code.

A **sense of duty** and honoring of commitments

*Friday 17h service goes down, what do you do?
There's a data-leak, what do you do?*

Result orientation; you set priorities, make decisions and overcome setbacks to achieve a goal.

Interpersonal

Ability to convince: people have different ideas and opinions, from time to time you will have to convince your colleagues with arguments and numbers that something is wrong or one solution is better than another.

Collaboration: the scale and complexity of data-engineering problems are such that they require collaboration.

Personal

Drive: you are intrinsically motivated to solve and investigate complex problems

Stress resistance: A service goes down and people are blocked. You promised to deliver and just before the official release something goes wrong.

In these moments you need to stay calm and investigate the problem step-by-step.

Conceptual

Analytical mind: ability to research things systematically.

Helicopter View: you can keep an overview and regularly take a step back to monitor the full picture

What are we looking for

technical skills

- Pattern recognition
- Derive functions from mathematical problems
- Learning ability of a new (technical) language
- Interpretation of graphs

What are we looking for assessments

Program 1:

After a successful video interview you will receive **2 links** to **online assessments**:

1. To assess your **personal competences**
2. To assess your **technical skills**

Program 2:

After successful completion of your video interview you will receive **2 links** to **online assessments**:

1. To assess your **personal competences**
2. To assess your **technical skills**

Afterwards you will also receive **a programming assignment** to complete in *C, Go, Python* or *Java*. The programming assignment will be accompanied by some extra questions to verify your familiarity with Linux, git, bash, operating systems and networking.

** The default language for all tests is Dutch however you can choose another language in the settings.*

*** You will not automatically get your results after completion of the tests. We will discuss them with you shortly after.*

Your contract

Upon acceptance of your candidacy, you will be contacted by the **Klarrio HR** department to go over your contract.

To **sign** the **contract** you will be invited to **our offices** in Antwerp, where we will show you around.

Once you successfully complete the program, you'll receive an **updated contract** in line with Klarrio's data engineer remuneration package.

Your contract **addenda**

Training stipulation (*scholingsbeding*)

Our training stipulation is in line with Belgian law whereby the employee who, during the execution of this employment contract, undergoes specific training at the employer's expense, agrees to reimburse part of the training cost if the employee decides to *leave the company before the agreed period*.

- The period is determined at **18 months** after completion of the program

Reimbursements, should you decide to leave are:

- between 0 - 6 months: 11.000 - 7.500 euro
- between 6 - 12 months: 7.500 - 3.000 euro
- between 12 - 18 months: 3.000 - 0 euro

*<https://werk.belgie.be/nl/themas/arbeidsovereenkomsten/uitvoering-van-de-arbeidsovereenkomst/scholingsbeding>

Your contract **addenda**

5-week test

Applicable only to Program-1.

Important!

After completing the first **5 weeks** of *Program 1*, there will be a **test** to **determine** whether the **employment** will be **continued or not**.

We conduct this test to protect both the employee and the employer, as the difficulty of the program will only increase from that point onwards.

Your contract **addenda**

Equipment

tutorrio will provide all the equipment required to follow the program. Treat it with respect and return it in the condition in which you received it (except for normal wear).

Dates to remember

- **Application** period starts: **6th of August** 2024
- We welcome applications till the **18th of November** 2024
- **Program 1** starts: **NOT** in 2025
- **Program 2** starts: the **13th of January 2025**

Apply now!

Go to our website www.tutorrio.com and apply **now**

Location & contact



tutorrio

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Questions?

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