

Content of the summer 2016 program

MN000 General introduction, cross cultural instructions and teambuilding

In this module Maxim Nyansa founders will explain the concept of the Maxim Nyansa training center, and the way we are going to work together, which will be a cross cultural working and living community of people from various nationalities. You get to know your peer trainees and get the first flavor of working with people from different nationalities. We set up in the first days, with our IT infrastructure, daily programs and the do's and don'ts of our training center. You learn to appreciate a disciplined, intense, joyful as well as a very ambitious family which aims to be the best of two worlds.

MN001 Maxim Nyansa Company Norms and Values

One of the three founders of Maxim Nyansa shares with you the vision, norms and values of the organization and how we think we can create a community – profit as well as not for profit – that shows the world that excellent quality can come from Africa, with good education and a strong drive and discipline, regardless one's social background. She explains how these values can help you to become successful in your life and your career.

MN002 Working in multicultural environments

In Ghanaian metropolitan regions you find them: successful business people who are not only capable of making it in Ghana, they are very successful on a global level. What is their secret and how can you train yourself in the same behavior?

In this module you learn how your culture determines your perspective on the world – and how the same is true for others. It helps you to be prepared for working in international companies, or in an outsourcing context, for customers in Europe. You will learn what work standards are generally accepted in international business and what challenges to overcome for people from an African background to be able to operate in such an environment. It helps you to define your own learning goals in this area and practice.

MN004 Personal Development

In this module, you learn to find your own personal mission and learning goals. This helps you to make a personal development plan for the training program at Maxim Nyansa, and the period after. With regular coaching, you will be able to reflect on your own strengths and points of improvement during the program as well as your communication style and effective interaction with others, in good and understandable English. The module helps you to prepare for a habit of lifelong learning, not necessarily through expensive training and schools but with the help of others and the use of the internet. The module is at the heart of our program and consists of 6 different elements:

MN004 A YOU

In IT there are dozens of different professions and each requires a different set of skills and personality profile. In this module, you think deeply about who you are, what your calling is in life and what your competences are. It aims to help you to find the right direction for your future career using best practice instruments from social sciences like:

- 360 degree feedback processing
- A mission statement for your life and your career
- A Personal Development Plan
- A six months mentor program

MN004 B YOU AND THE OTHERS – communication skills

This module takes the next step and deals with the way you communicate with others. For many IT professionals, communication is a big challenge. Fortunately, it is something you can learn and practice and this module is going to help you with that dealing with elements like

- Dynamic personality profile
- Effective communication
- Professional presentation
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MN004C HOW ARE YOU DOING AND GROWING

Our the program leader who will be overall responsible for the complete training program of 7 weeks and he will be living and working with the group during that whole period He will have a weekly hour of coaching with every trainee covering the following questions:

1. How are you doing practically, emotionally, spiritually?
2. How are you functioning in the team?
3. How is your family doing, are there any issues worrying you?
4. How is your learning process going?
5. What feedback do you get from the group and the trainers?
6. Do you need any additional help?
7. How are you doing developing your own learning ability?

MN004D WHERE ARE YOU GOING

At the end of the program, the program manager has an interview with you, exploring what your future would look like based on your Personal development plan and learning experiences during the program. He explores how Maxim Nyansa can use its network to help you to take the next step in your career as an IT professional:

- Work with Maxim Nyansa as an IT consultant in JHS
- Start your own business
- Get connected to an employer that suits you well
- Get a job at the commercial branch of Maxim Nyansa as a software developer

Further, issues addressed will be:

- how to continue to develop yourself in your career and use your personal development plan to continue to grow
- how to use free and minimal resources to be a succesful IT professional

MN004E HOW TO FIND YOUR OWN WAY

An experienced IT professional will be linked to a trainee as mentor for a period of 6 months online or live (inside Ghana) for a period of 6 months for advice and practical experience of being part of the global community of IT people helping and sharing online. You will be able to connect with your mentor twice a week or when necessary. Maxim Nyansa will use the

August period to match you with a mentor in the international community, but it is particularly important to use this opportunity when the program has ended.

MN004F FLUENT IN ENGLISH

Being an IT professional implies that you will be using resources and will be personally communicating with other IT professionals from all over the world. Here, English is the language that is commonly used. Depending on your social and regional background, your English will be very good, not so good, or you may have a strong West-African accent that makes it more difficult to communicate with people outside Ghana.

You will have an audio-language intake to examine where you are regarding the use of the English language and its pronunciation. After this intake, you will receive online advice from a certified speech therapist who is a native English speaker from the USA. Where necessary, follow-up language training will be scheduled during the 7 weeks of the program.

MN006 Project Management methods

A key skill for the successful delivery of IT products is project management. In this area, major changes are happening. Still, for every IT professional it is absolutely necessary to know how to properly manage a project within the right time, budget, and with a result that is required by his customer. In our training program, an extensive practical training will be given on the two main approaches that are currently being used: the traditional project management method with the global standard of PRINCE 2 and the new method of SCRUM for fast delivery of good quality software products. Both training weeks will be given by qualified professionals from the Netherlands, and prepare you for the international exam.

MN006a Prince 2

PRINCE2 is a project management methodology developed by the government of the United Kingdom (UK) and used internationally, especially in information technology (IT) environments. PRINCE2 makes use of the best proven practices from a variety of industries and backgrounds. Documents with templates and clear decision points are characteristics of this methodology. There are two exam-based levels of certification for individuals: Foundation and Practitioner. This training prepares you for the first level. PRINCE2 outlines eight processes to ensure a successful IT project. After the training you will have the theoretical and practical skills to use this methodology.

MN006b SCRUM

Scrum is an agile software development framework for managing product development. We start the course with an introduction on the background of Scrum. Also, we compare Scrum with traditional development methods (such as Prince II). Then we present the elements of the Scrum framework: roles, events, artefacts and a few simple rules. These are described in the Scrum Guide, which is provided to the trainees. Throughout the course, we apply Scrum in several practical assignments and we practice exam questions to prepare for the Scrum Master exam. After this module you

- understand the Scrum framework: events, roles, rules and artefacts

- can design and plan a Scrum “project”
- know how to track progress of a Scrum “project”
- can take part successfully in a Scrum “project”
- can evaluate the consequences of agile development
- know how to implement Scrum

MN007 IT architecture principles

In this module you learn why it is necessary to work with IT architecture and you will be introduced to the various levels of enterprise architecture and practise them. :

Business architecture which defines the business strategy, governance, organization, and key business processes of the organization

Applications architecture which provides a blueprint for the individual systems to be deployed, the interactions between the application systems, and their relationships to the core business processes of the organization with the frameworks for services to be exposed as business functions for integration

Data architecture which describes the structure of an organization's logical and physical data assets and the associated data management resources

Technical architecture, or technology architecture, which describes the hardware, software, and network infrastructure needed to support the deployment of core, mission-critical applications

MN008 Introduction to software testing

In a world that is more and more depending on IT and where criminals have found their way online, it has become crucial to have solid software testing in place. Software testing has been developing into a highly valued separate profession with many specializations like test automation and security testing. As an experienced test manager, Benedicta Nkansah is going to give you a first overview of the methodology of software testing. After this module you know what software testing is and why it is so important. In addition you will have had some practical experiences to have a first impression of the skill.

MN010 Refreshment of IT basics and IT infrastructure

As we are starting our program as well as during the 7 weeks, we will regularly check and update your general IT knowledge on the practical level. We will use the skills inside the group and look for online resources to learn how to troubleshoot when hardware, network or software problems occur or we find out there is something we do not know.

SD001 Introduction to educational software

At Maxim Nyansa we use educational software, not only at our training center for young IT graduates but also for our integrated IT projects for junior high schools. In this module we will introduce various ways to use modern media in teaching and introduces various online and offline tools and resources. After this introduction you will know how to find educational material online and how to work with learning management software. This will also enable you to study online with the help of free resources in the domain of IT, to continue your studies without the usual high costs of organized education.

SD003 Train the trainer workshop

This workshop is used in many different domains of development, where transfer of knowledge and expertise to a next generation of trainees should be ensured. You learn how to not only train people but also train them to become a trainer themselves to transfer what they have learned to new people. Solomon Salifu has practised this skill widely in various educational projects in the Tamale region and he is going to show is how to do it , too.

SD004 Infrastructure and setup of IT-labs

In this module you will learn how to set up the infrastructure of an IT lab in a school or in an office. You learn how to design the right setup (using some of the architecture principles from module MN007) and how to choose the right technical specifications. It will be a practical training working with a lot of technical parts and old computers, with the challenge to make it work. At the end of the module you should be able to setup an IT lab in a school or start your own office with the help of cheap second hand hardware, trash and a repair kit. You will be introduced to raspberry PI and be able to play wit hit.

SD005 Programming Bootcamp

When our IT infratstructure stands and works, we will move to this important part of the training where you learn to build your own webenvironment and run it on your own infrastructure. When you have finished this module you will have your own website to present yourself to the outside world and you will know how to build websites for others from scratch with your own code. We will be dealing with the following topics at a basic level:

- personal computers & operating systems. Most students will have their own computers; most likely a Microsoft windows system. We will discuss how to best configure the hardware available. Dual boot Windows/Linux systems are possible.
- Ubuntu - The bootcamp will use Ubuntu 16.04 LTS, the latest release of the popular Linux distribution.
- HTML - Hyper Text Markup Language - We will cover the W5 on HTML - the who, what, when where & why of HTML. Every internet page uses HTML. Content is the most important element for any web page. HTML is designed to give content structure.
- Cascading Style Sheets (CSS) - Content is important but style matters too. Laptops and phones need different styles. Just as the same cloth can be cut and tailored for different people; web pages net to be cut and tailored for different devices. CSS is the key.
- Javascript - the programming language for web browsers; the magic dust that turns a web page into an experience. If you can master programming in Javascript, you can be a web page wizard.
- Apache - Every web site has a web server program running in the background. Most web servers run Apache, open source and free.
- GIT - a source code management system.
- WiFi router configuration and small networks.

Exams: during the program you will be having the opportunity to take an international certification

PRINCE2

SCRUM

And we will do our own Maxim Nyansa Programming practical assignment