Short Learning Programme in Web Design

Mode and duration

Contact

Full-Time (Campus)
- Minimum: 7 months
- Maximum: 3 years

Part-Time (Campus)
- Minimum: 14 months
- Maximum: 5 years

Programme description

Become a web wizard. The Short Learning Programme in Web Design prepares you for work in the internet career-orientated programme that prepares you for the world of work. It is also a very good stepping-stone to further studies in any of our Higher Certificates in Information Systems (IS).

This Short Learning Programme provides you with a sound grounding of theoretical foundation of, and practical experience in creating web pages, web design, web style coding, using content management systems, as well as database development. Some of the core subject areas are Web Design, Content Management Systems, MySQL Development and Creating Web Pages. You also cover two broad topics that will be useful in any computer and business environment, namely Computer Literacy and Personal Skills Development.

The success of our Short Learning Programmes is due to our unique Mastery Learning Methodology (MLM). This modular self-directed learning approach gives you the flexibility to start and progress through the programme at a pace that best suits you. This learning methodology, together with our cutting-edge facilities such as computer labs, IS open learning areas and smart pods, will prepare you for the real IT work environment of the future.

What's more, you will start developing essential skills for the world of work, especially for the IT industry, such as analysing and solving real problems, applying logic, being innovative and self-disciplined, collaborating in team situations and communicating effectively.

Entry requirements

1. South African National Senior Certificate (NSC) with Bachelor's degree, Diploma or Higher Certificate endorsement.
2. Or a National Certificate (Vocational) level 4 issued by the Council of General and Further Education and Training with Bachelor's degree, Diploma or Higher Certificate endorsement.
3. Or a Certificate of evaluation on a minimum NQF level 4 for foreign qualification confirmed by SAQA.
4. Or a letter or certificate confirming an exemption from Universities South Africa (USAf) for any other school-leaving results.
5. Or completion of a Bachelor's degree, Diploma, Higher Certificate or equivalent.

Possible career options

Fascinated by the web?

The career choices for you, as a Short Learning Programme in Internet Development Specialist graduate, include junior positions in:
- Database Administration
- Web Development

Programme accreditation

- It is an Eduvos programme with modules that may articulate into the accredited Higher Certificates in Information Systems (Web Development, Engineering and Software Development), at NQF level 5.
- This Short Learning Programme is not accredited by the Higher Education Quality Committee (HEQC), nor is it registered with the South African Qualifications Authority (SAQA). However, the modules within the Short Learning Programme contain the accredited NQF level 5 modules which allows for direct articulation into the full qualifications.

This programme is offered at the following campuses:

- Bedfordview
- Bloemfontein
- Claremont
- Durban
- East London
- Mbombela
- Midrand
- Nelson Mandela Bay
- Potchefstroom
- Pretoria
- Tyger Valley
- Vanderbijlpark

Short Learning Programme in Web Design

Programme structure

Year 1

- Computer Literacy (Microsoft)
- Content Management Systems
- Creating Web Pages
- Database Design Concepts
- Introduction to JSON
- Mathematical Problem Solving and Reasoning
- Personal Skills Development
- Program Design
- Software Engineering

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Module Descriptors

Computer Literacy (Microsoft)
Computer literacy is the ability to effectively use technology to perform work. This skill is fundamental to successful employment within the knowledge economy. The purpose of this module is to prepare the student to use applications essential in the workplace. In addition, an information systems student must become familiar with the basic structure of a computer and how it works. This module will discuss how the Internet and personal portable computing have shaped the way in which work is performed today.

Content Management Systems
Students are shown how to set up and configure their choice of CMS, including the required databases. Students will understand how to use the administration interface as well as manipulate the content, layouts and design of a CMS template. This forms the basis for students to host their own websites with minimal knowledge of HTML or CSS.

Creating Web Pages
Students will create and use HTML components (i.e. images, symbols, headings, lists and tables) and also use new features from HTML5 Document Object Model (DOM) and DOM API created with CSS3 accompanied by JavaScript. HTML5 elements are designed to make it easier to include and handle multimedia and graphical content on the web. Students will also learn to create forms that are used to send information between pages.

Database Design Concepts
T his module focuses on systems analysis, entity relationship diagrams, data normalisation and mapping a database's design to tables.

Introduction to JSON
Students will understand that JSON is used to serialise and transfer data over a network connection. JSON (JavaScript Object Notation) refers to an open standard file format that is used to represent simple data objects and structures in web-based code. JSON is a very commonly used file format for browser-server communications as it is relatively quick and easy to understand. JSON was derived from JavaScript and is a file format that is considered to be language independent. JSON is mainly used as an alternate for XML in internet-based applications to organise data. Documents in JSON are easy and quick to execute in web servers as they are extremely lightweight to send back and forth in HTTP requests and responses due to the small file size.

Mathematical Problem Solving and Reasoning
The aim of this module is to provide students with a strong foundation in essential mathematical concepts, techniques, and their applications, enabling them to effectively solve computational problems and enhance their problem-solving skills in computer science and related fields.

Personal Skills Development
Personal Skills Development implies professional and personal growth in knowledge and skills. Personal Skills Development embraces a range of practical and transferable skills that can be applied within higher education and in the workplace. By conducting case studies, role play and real-life activities, the student should be able to improve their own learning, be involved in team work and be more capable of solving problems. The rationale behind this module is to expose the student to softer skills that are critical in the workplace and in higher education. This module attempts to encapsulate a range of key and common skills and deliver this information in a dynamic learning environment.

Program Design
This module will introduce basic concepts of programming logic using control structures. More advanced topics, such as arrays, file handling and functions are covered later in the course. The knowledge that students will gain will initiate the students to master, at a basic level, the process to develop computer program algorithms using Python.

Software Engineering
Students are then given a practical introduction to UML for use as a tool in the system development process. More specifically, students will familiarise themselves with use cases and scenarios, identify different actors that play a role in a system, and learn to draw using case diagrams. The unit also explores the use of state, sequence, collaboration, activity and deployment diagrams.