



CAREERS
BUSINESS INSTITUTE

www.cb institute.co.za

Occupational Certificate: Software Engineer (NQF 6)



Careers Business Institute has been empowering the community since its inception in 1991. We provide a comprehensive range of Management, Office Administration, Financial and IT courses that have been designed to help you launch your successful career. The Careers Training Group has campuses in Umhlanga Ridge and at the Chatsworth Centre in Kwazulu Natal

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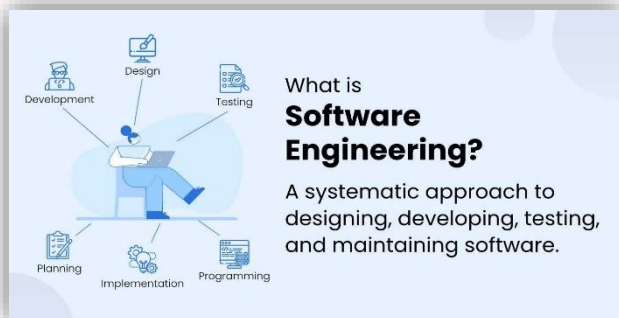
QCTO
Quality Council for Trades & Occupations

Occupational Certificate: Software Engineer (NQF 6)

What is a Software Engineer?

Software engineering is the process of developing, testing and deploying computer applications to solve real-world problems by adhering to a set of engineering principles and best practices. The field of software engineering applies a disciplined and organized approach to software development with the stated goal of improving quality, time and budget efficiency, along with the assurance of structured testing and engineer Certification.

Even though a software engineer usually manages many coding projects, software engineering entails more than just writing code for the software. In reality, software engineering encompasses every phase of the software development lifecycle (SDLC), from planning the budget to analysis, design, development, software testing, integration, quality and retirement.



Software The field of software engineering is constantly evolving, making it an exciting and dynamic career path. Software engineers are in high demand and the U.S. Bureau of Labor Statistics predicts that employment opportunities for software engineers will increase by 22% in the decade leading up to 2030. To become a software engineer, one must possess the right technical skills and

qualifications, which can be gained through a mix of education, work experience and technical certifications.

The Software Engineer Solution by Quality Council for Trades & Occupations (QCTO)

The QCTO is responsible for overseeing the development, implementation and maintenance of occupational qualifications within the South African National Qualifications Framework (NQF).



As an integral part of South Africa's education and training system, the QCTO is responsible for ensuring that the skills development programmes meet the required standards and are in line with South Africa's economic and social goals. By setting and maintaining high standards, the QCTO contributes to the overall improvement of skill development and workforce quality.

Is a Software Engineer Career for me?

Software Engineer Careers have the following characteristics; Adaptability, resourcefulness, and the ability to troubleshoot and problem-solve in high-pressure situations. They also have good communication and teamwork skills.

If you are any of these archetypes, you may be well suited to be a Software Engineer.

Occupational Certificate: Software Engineer (NQF 6)

Occupational Certificate: Software Engineer at Careers Business Institute

The Occupational Certificate: Software Engineer (NQF 6) program equips learners with the technical skills and practical experience to thrive as Software Engineers in today's dynamic tech landscape. Furthermore, the program emphasizes industry best practices and methodologies. This includes software design patterns, object-oriented programming concepts, agile development approaches.



The program delves into the entire software development lifecycle, guiding you through the process of requirements analysis and design, implementation, testing, deployment, and ongoing maintenance of software applications. You'll gain expertise in core programming languages and paradigms, empowering you to design and build robust software solutions.

Careers Business Institute have been producing professional graduates for over 30 years, being Nationally & Internationally accredited has assisted our alumni in finding employment sooner!

I'm a Certified Software Engineer, What now?

Certified Software Engineers have a wide range of Career Opportunities available. We have listed some of the more widely available careers for certified engineers;

- Cloud Engineer
- Mobile App Developer
- Front-End Developer
- Back-End Developer

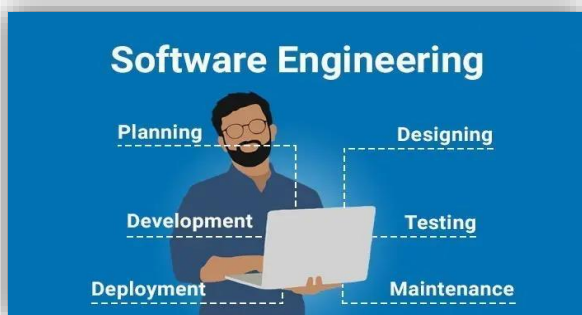


Students have the option of specialization through Information Technology (IT) programs offered at Careers Business Institute. Are you looking to become a Computer Technician or a Cyber Security Specialist? Join the Occupational Certificate: Artificial Intelligence Software Development (NQF 5) or move onto the Cyber Security Expert (NQF 5) Qualification to have access to higher level IT employment opportunities. Contact a Careers Business Institute Campus to find more about these courses and their requirements!

Occupational Certificate: Software Engineer (NQF 6)

Course Breakdown: Knowledge Modules

- Software Engineering
- Programming
- Database Design and Information Systems
- Fundamentals of Project Management in Relation to Software Engineering
- Digital and Business Mathematics



Course Breakdown: Practical Modules

- Document System Design
- Design and Manipulate Databases
- Programme and Deploy Applications
- Test or Debug Source Code to Ensure Client's needs are met

Course Breakdown: Work Experience Modules

- Software Design
- Database Design and Manipulation
- Software Development
- Software Testing

Minimum Requirements & Details

Minimum Requirements: Grade 12 (English) or any NQF 4 Qualification

Full - Time: 2 Years (Part time also available)

SAQA ID: 119458 Credits: 240

Assessment method: External Integrated Summative Assessment (EISA).

Includes FREE Learning Materials – No hidden costs!

Course Fees

Careers Business Institute has developed easy payment options for all courses. Please enquire for a full fee schedule