



FACT SHEET

Software Engineer



Private
Tertiary
Education

www.ctutrainning.ac.za



Software Engineer

FACULTY OF INFORMATION TECHNOLOGY

Occupational Studies: 2027 Fact Sheet

Programme Title	SAQA ID	Credits	NQF
Occupational Certificate: Software Engineer	119458	240	6

Programme description

Dive deep into designing, developing, and deploying comprehensive software solutions. Beyond coding, you'll lead teams, from Software Testers to Applications Programmers, shaping innovative applications and systems. Ready to architect the future of technology? Your path to becoming a tech visionary starts here.

This course is meticulously crafted for individuals aiming to master the art of building robust, scalable, and efficient software systems. A Software Engineer researches, analyses and evaluates requirements for existing or new software applications and designs, develops, deploys, tests within scope of work (debugs) and maintains software applications.

A qualified learner will be able to:

- ▶ Design software to meet clients' needs.
- ▶ Design and manipulate databases.
- ▶ Develop software to add value to the organisation.
- ▶ Test or debug source code to ensure client's needs are met.

Admission requirements

The minimum entry requirement for this qualification is:

- ▶ NQF level 4 qualification and CAT/Computer Science highly recommended.

Mode of study | Duration

Day Classes (full time): 24 Months (5 days/week)

Evening Classes (part time): 24 Months, (2 x evening classes per week, 18:00 - 21:00, Mon & Wed or Tues & Thurs as well as 2 x Saturday classes per month)

Programme outline

Modules

SDE611: Software Design and Engineering

SJD611: Java Dev & Cloud Fundamentals

APT612: Advanced Programming

JCI612: Java and Cloud Integration

MAT621: Mathematics

SDT621: Software Design and Testing

MDB622: Database Manipulation

SPM622: Software engineering Project management

Teaching and Learning Methodology

A blended teaching and Learning methodology is followed. All theory classes will be conducted Virtually through Lecturer-led interactive teaching on a national basis.

A flipped classroom approach will be followed in some sessions. This means that students are introduced to content at home and practice working through it during the applicable session, either the virtual theory sessions or the practical sessions. All students will be allocated to lecturers that are not necessarily based at the campus of enrollment but who will always be subject matter experts. CTU implements a national academic standard and all lecturers have been appointed on the same criteria and use the same academic content in the teaching and learning process. The adherence to a national academic standard is monitored by the Academic Management team at the Head office. Therefore, all students will continue to receive the same quality of education. Students will attend some practical, group, and research sessions on campus or virtually. The same work and time will be spent on both methods, face to face and VLIT, with students. Extra practical sessions can be booked with the Campus Operational Manager. Students will be expected to attend the practical, group, and research classes on campus a minimum of two days a week, as per the campus schedule.

Textbooks and e-guides

A list of prescribed textbooks will be provided in your e-guides. Students will receive an electronic version of the academic guides (e-guides) for this programme on the Teaching and Learning platform. Access is available to an electronic library of textbooks on O'Reilly, and it is included in the fees. Refer to the [Device Specifications and Stationery List](#) document for more information.

Technology hardware, software and data requirements

Because CTU is embracing the future of education - education beyond the classroom - it is compulsory for students to have their own laptop with the necessary specifications to speed up their journey to success.

Student Support

Student support sessions with the facilitator will also take place on a one-on-one basis either virtually or physically at the campus per appointment or per the academic schedule.

External Summative Assessment and Certification

In order to qualify for the external summative assessment, learners must have a copy of a completed and signed Statement of Work Experience as well as proof of successful completion of the Knowledge Modules and Practical Skills Modules.

Software Engineer

Upon completion of this course, students will be awarded an **Occupational Certificate: Software Engineer from the QCTO**.

International Certifications

Included in price

Year 1

- ▶ CLF-02 AWS Cloud Practitioner
- ▶ AZ-900 Microsoft Azure Fundamentals
- ▶ Java Coding Specialist

Year 2

- ▶ AI-200 Developing AI Cloud Solutions on Azure
- ▶ AZ-400 Designing and Implementing Microsoft DevOps Solutions

Students own account

- ▶ 1Z0-811 Java Certified Foundations Associate
- ▶ CompTIA Project +

Career fields

Students can be employed in the following career fields:

- ▶ Software Engineer
- ▶ Multimedia Programmer
- ▶ Software Tester
- ▶ Systems Analyst
- ▶ Data Engineer
- ▶ Microsoft DevOps Expert
- ▶ Database Designer
- ▶ Lead Developer

What is EISA?

The External Integrated Summative Assessment (EISA) is an integral and critical component of the QCTO's quality assurance system. It is a single national assessment leading to the awarding of an Occupational Certificate. EISA ensures

that the assessment of occupational qualifications, part qualifications and trades is standardised, consistent and credible.

For learners to qualify for entry to EISA, they must provide proof of completion of all required knowledge, practical and work experience modules as stipulated in the qualification. The statement of results obtained from the Skills Development Provider serves as proof that the candidate has satisfied all the requirements to be admitted to sit for EISA.

Pricing*

Programme	Registration Fees	Tuition fee
Year 1	R9 000	Contact a CTU campus/consultant for the latest fee information and payment options.
Year 2	R9 000	

* Excludes external fees and identified textbooks if applicable.

Payment

Visit our website to view the payment method.

[Payment Methods.](#)

[APPLY for Student Loan HERE!](#)

Additional costs

Students must make provision for additional items such as textbooks, stationery, supplementary examinations, research costs and printing, field trips etc.

Disclaimer

The content of this fact sheet is subject to change without notification due to market trends in the industry, legislation and/or programme version updates. Refer to website for the latest version of the prospectus. CTU Training Solutions (PTY) Ltd, reserves the right to change the programme content without prior notice. Additional international exams may be written but are not included in the programme fee. Minimum student (capacity) group sizes will fall into the Virtual Instructor-Led programme commencing in the months of February & July of each year.

I (Name of student):_____ hereby acknowledge that I understand the information stated in this document and fully comprehend the specifics explained above pertaining to this qualification.

Student signature:_____

Signature of legal guardian:_____

Name of legal guardian:_____

Consultant signature:_____

Name of sales consultant:_____

Date:_____

* Please note the original signed copy should be kept on the student record file.

CONTACT US

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