



# Your Qualification



## Diploma in Information Technology in Software Development

The Independent Institute of Education (The IIE)

If you're a creative thinker and enjoy problem-solving, then this cutting-edge Diploma is for you and will place you on the fast track to the mind-blowing world of Information Technology. Modules which include programming, web development, systems analysis and database design will ensure that you are equipped with versatile skills and knowledge to take your steps into an environment of application and software development, thereby creating a wealth of opportunities for yourself. The IIE Diploma in Information Technology in Software Development provides a combination of fundamental business-related skills and IT programming-specific competencies, equipping the learner with the baseline knowledge to function effectively in the IT programming environment.

### What is this Diploma's accreditation status?

The IIE Diploma in Information Technology in Software Development is accredited by the Council on Higher Education (CHE) and is registered by the South African Qualifications Authority (SAQA) on the National Qualifications Framework (NQF) as a 360-credit qualification on level 6 (SAQA ID: 74651).



Varsity College is an educational brand of The Independent Institute of Education (Pty) Ltd which is registered with the Department of Higher Education and Training as a private higher education institution under the Higher Education Act, 1997 (reg. no. 2007/HE07/002). Company registration number: 1987/004754/07.

## Who is this Diploma aimed at?

Individuals who are suited to the software development industry should fit the following profile in terms of personality traits, interests and abilities: interested in computer programming and development of solutions, have a strength in problem-solving, be a clear and logical thinker, have a technical and mathematical inclination, an ability to concentrate, be methodical and persistent, and an ability to put information into a logical sequence. If you have these analytical skills, then this qualification will speak to you. This IIE Diploma provides a combination of sound academic knowledge and practical skills required to be able to enter the dynamic world of software development. The qualification offers the student a comprehensive understanding of systems and programming focusing on extensive application of skills and knowledge in computerised and programming environments. Ingenuity and creativity are particularly important as well as the ability to work with abstract concepts and technical analysis.

## What entry requirements will I need to study this Diploma?

Minimum Admission Requirements	English	Notes
NSC: Diploma with	30%	
NC(V): Diploma pass with	40%	
SC: Endorsement - none with	33.3%	
SC(a): Diploma pass	A minimum of 30% in LoLT in NSC/ SC(a) OR with a min. of 33.3% in SC	
<u>International:</u> A SAQA Evaluation Certificate with NSC L4 equivalence with at least 40% or equivalent for English.		Please refer to the International Admissions spreadsheet for further admissions criteria.
Alternatively, a cognate Higher Certificate (or equivalent) or Advanced Certificate may satisfy the minimum admission requirements to diploma studies.		If the discipline not cognate at least 20% of credits must be academic literacy or numeracy related.
Senate Discretionary Admissions	Mature Age Exemption	Candidates must have attempted the Senior Certificate or equivalent, attained the age of 23 before or during the first year of registration with three years' work experience and proven ability relating to the proposed programme as well as adequate communication skills; OR Candidates must have

		attained the age of 45 before or during the first year of registration.
	Recognition of Prior Learning (RPL)	Where candidates do not satisfy the formal admission requirements for this qualification, The IIE may consider an admission application in terms of the Credit Accumulation and Transfer, Recognition of Prior Learning and Qualification Completion Policy (IIE010).
	USAf approved cognate foundation programme	Candidates who have completed an USAf approved cognate foundation programme from a registered and accredited provider may be admitted.
	Transfer students	Candidates who have successfully completed at least 120 credits on the first year of a cognate 3-year diploma may be admitted. However, if a student completed less than 120 credits, the admission criteria on the NSC or equivalent or higher certificate or advanced certificate apply.
	OQSF qualifications	Candidates with an OQSF Level 5 cognate qualification may be admitted, provided the OQSF qualification has at least 120 credits at NQF Level 5.
	General Education Development (GED) - An USA qualification developed by the American Council on Education (ACE)	Candidates with a GED qualification may be admitted if they have a SAQA Evaluation certificate with NSC L4 equivalence as well as a score of at least 38 for Academic Literacy (AL) and a score of at least 38 for Quantitative Literacy (QL).

## What is The Teaching and Learning Strategy of The IIE's Varsity College, and how will it help prepare me for the 21<sup>st</sup> century working world?

Our teaching and learning approach is based on active learning which enables us to focus on the skills you need to succeed in the New World. This way, the student is at the centre of learning. Academic life, we believe, should be as relevant and participative as possible – a dynamic, two-way exchange. This enables students to:

- Engage with subject material
- Build understanding
- Develop critical thinking and problem-solving skills for the 21<sup>st</sup> Century workforce.

This collaborative approach teaches you how to think, and to ask questions, the right questions. We call it New World Thinking.

Our active learning approach is structured as a blend between online and face-2-face lectures. This allows us to take learning beyond the confines of the lecture room. independent, self-directed learners. Our Learning Management System called VCLearn enables this blend and affords you a range of approaches to teaching and learning, and resources that are designed to promote self-organised learning and thought leadership.

## How is this Diploma structured at The IIE's Varsity College?

The IIE Diploma in Information Technology in Software Development is a three-year diploma. The modules are delivered on a full-time basis with lectures being scheduled during the day from Monday to Friday.

Please note that in line with academic practice, The IIE's curriculum is reviewed annually thus changes may occur in module structure and sequence in order to ensure that the qualification remains relevant. The exit level outcomes of the programme do not change. Registered students receive an updated programme curriculum on an annual basis.

## What will I study in this Diploma?

### CURRICULUM – FOR STUDENTS STARTING IN 2021

#### Year 1

1 <sup>st</sup> Semester	Credit Value	NQF Level	2 <sup>nd</sup> Semester	Credit Value	NQF Level
Business Information Systems (BUIS5111)	15	5	Introduction to Quantitative Thinking and Techniques (IQT5111)	15	5
Information Security (ISEC6112)	15	6	IT Professional Practice (ITPP5112)	15	5
Programming 1A (PROG5121)	15	5	Programming 1B (PROG6112)	15	6
Programming Logic and Design (PRLD5121)	15	5	Web Development (Introduction) (WEDE5020)	15	5

**Year 2**

1 <sup>st</sup> Semester	Credit Value	NQF Level	2 <sup>nd</sup> Semester	Credit Value	NQF Level
Database Introduction (DATA6211)	15	6	Database (Intermediate) (DATA6222)	15	6
Programming 2A (PROG6221)	15	6	Human Computer Interaction (HCIN6222)	15	6
Systems Analysis and Design (SAND6221)	15	6	IT Project Management (IPMA6212)	15	6
Web Development (Intermediate) (WEDE6021)	15	6	Programming 2B (PROG6212)	15	6

**Year 3**

1 <sup>st</sup> Semester	Credit Value	NQF Level	2 <sup>nd</sup> Semester	Credit Value	NQF level
Open Source Coding (Introduction) (OPSC6311)	15	6	Software Quality and Testing (SQAT6322)	15	6
Operating Systems (OPSY5121)	15	5	Applied Programming (APPR6312)	15	6
Work Integrated Learning 3A (XISD5319)	15	5	Open Source Coding (Intermediate) (OPSC6312)	15	6
Advanced Databases (ADDDB6311)	15	6	Work Integrated Learning 3B (XISD6329)	15	6

**Prerequisites/ co-requisites:**

There are no pre-requisites.

Co-requisites apply to several of the modules in this programme and must be met in order to progress through the qualification. See table below.

## Co-requisites

Module Code	Co-requisites
PROG6112	PROG5121, PRLD5121
PROG6212	PROG6221
PROG6221	PROG6112, PRLD5121
WEDE6021	WEDE5020
DATA6222	DATA6211
ADDDB6311	DATA6222
OPSC6312	OPSC6311
XISD5319	IPMA6212, PROG6212, DATA6222
XISD6329	IPMA6212, PROG6212, DATA6222, XISD5319

### **What about timetables?**

The IIE's full-time programmes are aimed at students wishing to dedicate themselves to full-time studies for the duration of their qualification. This means that students are expected to engage in additional learning activities and assessments outside of the scheduled lecture-time.

Students must understand that timetables remain subject to change throughout the year. Unfortunately, we cannot guarantee that timetable structures will remain the same during each year of your studies with us. In addition, where students are repeating modules, these modules may be offered in the evenings or on weekends. Students are required to attend lectures in order to remain up to date with the academic programme. Students who would like to pursue limited part-time employment opportunities outside of the academic programme must prioritise their studies and avoid committing to work schedules until after they have received their timetables and academic calendar from the institution.

### **Work Integrated Learning (WIL) 3A**

You will be provided with an opportunity to demonstrate your understanding in a work-related environment. You will be required to complete project management processes and procedures and to offer your software development services to a non-profit organisation, non-governmental organisation, small entrepreneurial venture or source your own project. This Work Integrated Learning component aims to increase your knowledge and develop your skills using the action and reflection processes of work integrated learning. You will be required to plan and design your project based on concepts learned in core subjects in preparation for the development of the project in the module Work Integrated Learning 3B. Students will be expected to present the planning, the analysis and the design. The project will include the consideration of a client's needs and their goals and objectives. You will be compelled to adopt analytical and creative thinking and logical problem-solving skills. The culmination of the project requires you to submit a portfolio of evidence.

### **Work Integrated Learning (WIL) 3B**

You will be provided with an opportunity to demonstrate your understanding of software development in a real-life work environment. You will be expected to apply the planning, the analysis and the design you completed in WIL 3A and then implement the project for WIL 3B. The project will include the consideration of your client's needs and their goals and objectives. You will need to adopt analytical and creative thinking and logical problem-solving skills. On conclusion of the project you will be required to submit a portfolio of evidence. You must complete the Work Integrated Learning component to achieve the graduate requirements of this programme.

### **What must I pass in order to graduate with this Diploma?**

To be awarded this qualification, you must have achieved a minimum final year mark of fifty percent (50%) for each module of the programme; and have met all the Work Integrated Learning requirements, where applicable.

### **How long do I have to complete this qualification?**

Students have a maximum of 6 years to complete this qualification.

## **With what qualification will I graduate?**

You will graduate with The IIE Diploma in Information Technology in Software Development.

## **Career opportunities: what careers areas can I pursue after I have completed this Diploma?**

- Software Developer
- Mobile App Developer
- Computer System Analyst
- Mobile application developer
- Database Information System Support
- Database Administrator
- Web Developer
- Project Manager

## **Websites for you to visit:**

[www.softwareengineer.org.za](http://www.softwareengineer.org.za)

[www.comptia.co.za](http://www.comptia.co.za)

<http://www.itweb.co.za/>

[www.itbusinessedge.com](http://www.itbusinessedge.com)

**Call your nearest IIE's Varsity College campus to discuss your career options with one of our Student Advisors.**

**DISD 2021 V1 27082020**

*Disclaimer: Please note that this fact sheet is accurate at the time of publication. The Independent Institute of Education (The IIE) reserves the right to alter any of the content prior to commencement of registration due to changes in regulation, policy, market requirements or any other valid reason.*



## **British Accreditation Council**

The IIE is not only accredited in South Africa but its dedication to providing quality education also led to it being accredited by the British Accreditation Council (BAC) in 2014. The British Accreditation Council is an independent authority in the United Kingdom that accredits private providers globally, including Greece, Switzerland, Singapore, India, Mauritius and the United Arab Emirates. In 2017 The IIE had its accreditation status confirmed by the BAC as an Independent Higher Education Institution confirming our confidence in the international comparability of our standards.

“South African students need to know, when they select a private higher education institution, that the standards offered are equivalent to those of a public University. Our students get this

from our extensive local accreditation and registration. The students also benefit from knowing that we meet international standards too. The IIE is accredited as an Independent Higher Education Institution by the British Accreditation Council. Locally and internationally we have demonstrated the quality of what we offer,” said Dr Coughlan, Director, The Independent Institute of Education.

The IIE’s Varsity College students can be confident that their IIE learning experience meets international best practice standards.