UNIVERSITY OF ESWATINI

INSTITUTE OF DISTANCE EDUCATION

PROGRAMME TUTORIAL LETTER

PROGRAMME: Bachelor of Science in Computer Science Education (BSc.Comp.Sci.Ed)

October 2021

1 Introduction

This programme tutorial letter provides general information about the Bachelor of Science in Computer Science Education (BSc.Comp.Sci.Ed) programme. You will find additional information from the following resources:

Resource	Uniform Resource Locator (URL)
University Calendar	http://www.uneswa.ac.sz/administration-registrar-corporateaffairs-publications/university-calendar-almanac/
IDE Student Handbook	http://www.ide.uneswa.ac.sz/wp-content/uploads/2020/10/IDE-Student-Handbook-1.pdf
IDE081_Admin Module**	https://learn.uneswa.ac.sz/course/view.php?id=37413 This module is for administrative purposes and is managed by the BSc.Comp.Sci.Ed Programme Coordinator. You will find information such as the teaching timetable and other administrative updates. General questions may also be posted on the module's Discussion Forum. Make sure you visit the site at **regularly**.

The primary goal of this programme is to prepare you to be a professional Computer Science Educator. The curriculum covers the science and art of teaching and learning of computer science, computing and computational thinking. In section 3, you will observe that the programme consists of forty-four (44) core and required courses and three (3) general education courses. The general education courses are mandatory for all university students and include two Academic Communication Skills courses (ACS111 and ACS112) and the HIV Prevention, Infection and Management of AIDS course (GNS113).
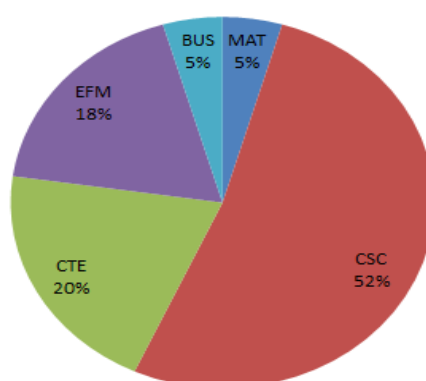

Figure 1: *Core and Required Courses Distribution*

As shown in Figure 1.0, a majority (52%) of the core and requires courses are drawn from Computer Science (CSC) and of the remaining courses, 20% are from Curriculum and Teaching (CTE), 18% from Educational Foundations and Management (EFM) , 5% from Business Management (BUS) and 5% from Mathematics (MAT). Effectively, this programme offers a major in Computer Science and a

minor in Education. This unique combination does not only provide enough Computer Science content and education skills for you to teach the secondary and high school curriculum in the Kingdom of Eswatini, but also the ability to compete effectively in the private sector for ICT and Computer Science positions such as systems analysis, administration and management. We believe you will be able acquire all the requisite skills through our flexible distance education (DE) delivery mode.

Section 2 that follows summarise the key features of Distance Education (DE). The program course structure is covered in Section 3. Administrative issues around registration and payment of fees are briefly discussed in Sections 4 and 5 respectively. . Section 6 and 7 summarises your role and your instructor's role, in the face-to-face sessions and online learning processes. Section 8 explains how you will be assessed in each course and how your final mark is calculated as a weighted average of your continuous assessment (CA) and final examination mark. Issues related to student support services are discussed in Section 9.

2   The Open and Distance e-Learning Delivery Mode

The Distance Education (DE) system involves teaching and learning at a distance with a package of multimedia instructional materials. It is learner-oriented and enables the learner, to learn independently away from campus at a distance at his/her own pace and place.

Open Distance and eLearning (ODeL) is a flexible and convenient method of teaching-learning system using multi-media resources, such as self-instructional course materials; limited face-to-face classes; and online teaching-learning system. The combined use of face-to-face and online learning is often defined as "blended learning". The ODeL structure provides students with great flexibility and control over time, so that they can study at their own pace, place and convenience during the weekends or whenever they find convenient time during the week. It also provides flexible educational opportunities in terms of access and multiple modes of knowledge acquisition, anytime from anywhere provided the internet connectivity is available. Learning materials and instruction can actually be obtained either in print or online at any time soon after they enrol into the programme.

Through distance education mode, learning opportunities are brought to learners at home or in a work place, irrespective of whether they remain in one location or become mobile during their study. Further, the hallmark of distance education is the quality of course materials prepared by subject specialists. As such the quality of teaching-learning in distance education is the same as the quality of teaching-learning in full-time provided the students actively interact with peers, lecturers and study materials to excel in their studies.

You may find more information in the student handbook available here: http://www.ide.uneswa.ac.sz/wp-content/uploads/2020/10/IDE-Student-Handbook-1.pdf

3 Programme Structure

The normal duration of the programme shall be eight (8) semesters (four years). However, depending on your work commitments you may be allowed to take fewer courses per semester and therefore take longer to graduate. The courses offered per semester are as shown in the section 3.1 that follows.

3.1 Courses on Offer per Semester

The programme shall consist of the following courses:

LEVEL 1:

SEMESTER I				
Core Courses		L	P	Cr
CSC111	Introduction to Computer Science	3	3	4.0
CSC113	Introduction to Information Technology	3	0	3.0
Required Courses				
CTE101	Introduction to Teaching Profession	2	0	2.0
EFM103	Developmental Psychology	3	0	3.0
MAT111	Algebra, Trigonometry and Analytical Geometry	3	2	3.7
General Education Courses				
ACS111	Academic Communication Skills: English for Academic Purposes	2	0	2.0
GNS113	HIV Prevention, Infection and Management of AIDS	2	2	2.2
Total Semester Credits				**19.9**

SEMESTER II				
Core Courses		L	P	Cr
CSC112	Computer Programming I	3	3	4.0
CSC104	Computer Applications	3	2	3.7
Required Courses				
CTE102	Curriculum Theory	3	0	3.0
EFM104	Educational Psychology	3	0	3.0
MAT112	Introduction to Calculus	3	2	3.7
General Education Courses				
ACS112	Academic Communication Skills: English for Specific Purposes	2	2	2.2
Total Semester Credits				**19.6**

LEVEL 2:

SEMESTER III				
Core Courses		L	P	Cr
CSC203	Discrete Mathematics	3	2	3.7
CSC213	Computer Programming II	3	3	4.0
CSC251	Human computer interaction	3	2	3.7
CSC121	Communication Fundamentals	3	2	3.7
Required Courses				
BUS211	Management Information Systems I	3	0	3.0
Total Semester Credits				**18.1**

SEMESTER IV				
Core Courses		L	P	Cr
CSC222	Computer Architecture & Organisation I	3	2	3.7
CSC242	Object Oriented Programming	3	3	4.0
CSC262	IT Law and Ethics	3	0	3.0
CSC272	Database Design I	3	2	3.7
Required Courses				
EFM210	School and Society	3	0	3.0
BUS212	Management Information Systems II	3	0	3.0
Total Semester Credits				**20.4**

LEVEL 3:

SEMESTER V				
Core Courses		L	P	Cr
CSC311	Data Structures and Algorithms	3	2	3.7
CSC321	Computer Architecture & Organization II	3	2	3.7
CSC393	Systems Analysis and Design	3	2	3.7
CSC431	Computer Networks I	3	2	3.7
Required Courses				
CTE303	Technology and Skills in Education	0	2	0.7
CTE337	Curriculum Studies in ICT I	3	0	3.0
EFM313	Educational Evaluation	3	0	3.0
Total Semester Credits				**21.5**

SEMESTER VI				
Core Courses		**L**	**P**	**Cr**
CSC322	Modern Operating Systems	3	2	3.7
CSC352	Graphics and Multimedia	3	3	4.0
CSC432	Computer Networks II	3	2	3.7
Required Courses				
CTE302	Micro–teaching Laboratory	0	4	1.4
CTE338	Curriculum Studies in ICT II	3	0	3.0
EFM302	Educational Administration	3	0	3.0
EFM314	Educational Research	3	0	3.0
Total Semester Credits				**22.8**

LEVEL 4:

SEMESTER VII				
Core Courses		**L**	**P**	**Cr**
CSC402	Research Project	0	3	2.0
CSC421	System administration and maintenance	3	2	3.7
CSC433	Web Technology and Development	3	3	4.0
Required Courses				
CTE403	School Librarianship	0	3	1.0
CTE407	Information and Communication Technology in Education	3	0	3.0
EFM401	School Administration	3	0	3.0
EFM403	Guidance and Counselling in Education	3	0	3.0
Total Semester Credits				**18.7**

SEMESTER VIII				
Required Courses		**L**	**P**	**Cr**
CSC402	Research Project	0	3	2.0
CTE450	Teaching Practice			16.0
Total Semester Credits				**18.0**

3.2 Total Number of Credits per Completed Programme

A total of one-hundred-and-fifty-nine (**159**) credits are required to graduate in this programme.

3.3 Course Instructors and Tutors

For the 2021-2022 academic year, the Semester I allocation of course instructors and tutors is as shown in the table that follows. Office and Telephone numbers (where available) only provided for full-time staff members.

Code	Instructor	Office Number	Office Telephone	Email Address
CSC111	Dr. S. G. Fashoto	S2.115	---	sgfashoto @uniswa.sz
CSC113	Dr. C. Gurajena	---	---	cgurajena@uniswa.sz
CTE101	Prof. O. I. Oloyede	C2.5	25170427	oioloyede@uniswa.sz
EFM103	Ms. S. Malindzisa	C3.13	25170319	
MAT111	Dr. J. Malinzi	S2.014	25170258	jmalinzi@uniswa.sz
ACS111	Ms. T. S. Dlamini	---	--	teresasibonisile@gmail.com
GNS113	Ms. S. S. Gwebu	---	25170737	SGwebu@uniswa.sz

3.4 Face-To-Face Contact Session Dates and Venues

Normally a maximum of five (5) study sessions will be allocated be semester. A time-table for these study sessions will be made available on Moodle LMS under module code: IDE081-ADMIN (https://learn.uneswa.ac.sz/course/view.php?id=37413). Additional tutorial and practical sessions will be arranged by the course instructor and communicated accordingly.

4   Registration

4.1   Correct Registration

For each semester, you will be required to register for at least two courses. Whereas it is possible to register for all the courses per semester (and graduate faster), you are advised to consider your personal circumstances. This includes issues such as your work commitment and whether or not you are also carrying courses from a previous semester. Your registration may also be limited by your current academic status from the previous semester. For instance, if you are currently on probation the regulations require that you register for fewer courses. **I strongly advise you not to register for more courses than you can possible handle**.

As articulated in the IDE student handbook: http://www.ide.uneswa.ac.sz/wp-content/uploads/2020/10/IDE-Student-Handbook-1.pdf), follow the procedures below for correct registration. As a new student, you will:

- First approach the IDE Academic Office for verification of your certificates. Bring all your original academic certificates and admission letter for verification.

- After verification of your certificates, go to the Bursary Desk to present your Proof of payment for your Tuition Fees, and follow the directives you will be given.

- Proceed for Online Registration of your programme courses. You will be assisted with registration by the IDE Coordinators, Senior Assistant Registrar (IDE), Technologist (IDE) and the relevant Faculty Heads of Department.

As a prospective student, it is your duty to follow all these steps and make sure that the information included in your registration form is correct and relevant. Do not forget to take your copy of the registration form for safe-keeping.

4.2   Dropping and Adding Courses

After registration, the University may allow you to add or drop courses. Normally, this will only be allowed within the **first two weeks** of the semester.

4.3   Exemptions

According to the University regulations, exemption may be granted for courses taken and passed at UNESWA or any other recognised institution. The procedure is that you must write an application letter to the academic office and attach your certificate and transcript from the other institution(s). Normally, the exemption will be granted if it certifies the following conditions:

1. You must be registered before you apply for exemption.
1. You must have obtained the qualification within 10 consecutive semesters. In other words the qualification must not be older than 5 years. For the 2021-2022 academic year, your qualification should have been completed in 2017 or later.
2. The course content must be equivalent to the course(s) you want to be exempted from. In this regard, you may be required to submit course the outline(s) from the other institution

All exemptions are processed and granted by the department offering the course. After submitting your application, you must remain in class until you get a response from the academic office.

Based on previous applications and approved exemptions, you are advised as follows;

1. Exemptions are typically granted only for level 1: courses. Most departments are very reluctant to grant exemption for higher level courses.
2. If you qualify, the ACS department will normally grant you exemption from ACS111 but not ACS112.
3. Normally, you will not be granted exemption from MAT111 and MAT112.
4. Information Technology and Computer Science Diploma holders are more likely to be exempted from CSC104, CSC111, CSC112, CSC113 and CSC121.

Once again, remember that you must first register for the course before you apply for exemption. Refer to the University Calendar for more details. Here is the URL: http://www.uneswa.ac.sz/administration-registrar-corporateaffairs-publications/university-calendar-almanac/

4.4 Credit Transfer

In cases where you started a previous programme at UNESWA, but did not finish it, credit for already passed modules may the transferred to BSc. Computer Science Education programme on condition that it was obtained within 10 consecutive semesters. Refer to the University Calendar for more details: http://www.uneswa.ac.sz/administration-registrar-corporateaffairs-publications/university-calendar-almanac/

5 Payment of Fees

In terms of the University Act and Statutes, you only become a student of the University once you have paid your tuition fee for the semester and are properly registered with the University. Therefore, you are encouraged to pay all stipulated fees as per the guidelines provided by the student finance office. **Ordinarily, all marks earned while you are not properly registered will be declared null and void by the University Senate**.

6 Attendance of Face-To-Face Sessions

6.1 Purpose

IDE provides a limited number of face-to-face lectures and tutorial or practical sessions. The purpose of lecture sessions is to clarify concepts you might find difficult and provide you with insights and guidance on what is likely to be assessed. They give you information on how to carry out the activities, assignments and general study of the course content. The tutorials assist you with challenging content or difficulties met while studying. It is your duty to raise questions during the tutorial sessions.

6.2 Your Role

Read all relevant materials and complete all required tasks before attending the face-to-face session. The face-to-face session provides an opportunity for you to interact with your instructor and seek clarification and guidance on the course material.

6.3 Your Course Instructor's Role

The role of an instructor is not to do the reading for you. Instead, the IDE instructor offers guidance and clarifies concepts. You, on the other hand, have to use the guidance from the instructor, read the Modules and relevant textbooks or whatever material that you will be given to deepen your understanding of all content that will be taught.

7   Online Learning Activities

Online learning in this University is delivered through the Moodle Learning Management System (LMS), which is the only official learning platform for online learning. You are enrolled on the Moodle LMS for all your registered courses immediately you are registered. You will access Moodle on (https//:learn.uneswa.ac.sz). In case you have challenges accessing Moodle LMS, the Technologist will assist you or you can write to (ictc@uneswa.sz). Always use your Student ID number and your name when communicating with any official for you to be assisted faster.

During the Course of the Semester, you need to visit the Moodle LMS site to access course content and participate in online learning activities and assessments. I recommend that you design a timetable for study during the week since you will be attending face-to-face classes on weekends.

8   Continuous Assessment (CA) and Examination

8.1   Assignments

Each course may have assignments specified in the course outline. The number of assignments is at the discretion of the course instructor. So, you are encouraged to do all work assigned to you on time.

8.2   Tests

Normally, each course will have a minimum of two (2) tests as determined by the course instructor and specified in the course outline.

8.3   Examination

Usually, each course will have a final examination. All examinations are coordinated by the academic office and written at the end of each semester. In this regard, a timetable will be circulated a few weeks before the start of the examination period.

8.4   Final Mark Calculation

Your final mark for each course is a weighted average of the CA and Examination mark. The weighting is derived from the special regulation of the department offering the course. Typically all Computer Science and Information Technology (CSC) courses have a weighting of 40:60. That is the CA marks contributes 40% to the final marks and the Examination contributes 60%. However Curriculum and Teaching (CTE) and Educational Foundations and Management (EFM) courses normally have a weighting of 50:50. In addition, some courses may be assessed based on CA only. Refer to the University Calendar for more details: http://www.uneswa.ac.sz/administration-registrar-corporateaffairs-publications/university-calendar-almanac/

8.5 Missed tests and Assignments

You are encouraged to do all your work and submit on time as required by your course instructor. Usually no make-up tests or assignment shall be given unless there is a valid reason such as ill-health. In case you miss a test, you need to report to the Coordinator Support Services in IDE who would assess if your request is genuine and give you a support letter to use when requesting a make-up test.

8.6 Make-up tests

Make-up tests shall only be given at the end of the semester on a date stipulated in the timetable.

8.7 Academic Dishonesty and Plagiarism

All work submitted for assessment, must be your own and not copied from your friends or any other sources. The University Calendar stipulates the penalties for any person involved in academic dishonesty and plagiarism. You are therefore, encouraged to read the relevant section in the calendar on the following issues:

(i)   **Misconduct in tests and examinations** – strict punitive/disciplinary measures are taken against those of you who are involved in misconduct during tests and examinations.

(ii)   **Plagiarism** – this refers to the copying of all or part of another person's work, material, publication, report, data, computer files and listings, assignment, results of an experiment, project and/or academic work without due acknowledgement of the source of that information. If you copy someone else's work without indicating your source then you are guilty of plagiarism and you will be given a zero.

9   Student Support Services

The Student Support Services Unit offers guidance and counselling on a range of issues. The coordinator is **Ms. N. C. Mabuza** (nomabuza@uniswa.sz), office number 10 in the IDE building.

10 Conclusion

I do hope you will find the information on this short tutorial letter relevant and useful. Should you require further clarification you can send me an email at eldube@uniswa.sz . For face-to-face consultation you may find me in office number **S2.114** located in the Faculty of Science and Engineering Building, Kwaluseni Campus. I am also in the office on most study days between 8:00am and 1:00pm.