

Program Handbook

Bachelor of Science in Information Technology (BIT)

TEXILA AMERICAN UNIVERSITY- ZAMBIA

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1. INTRODUCTION

School of Information Technology at TAU imparts all the technical skills to the students to get expertise in various technologies and keeping them updated in the global scenario. School is dedicated in providing a unique learning experience that would enhance a student's education professionally. School of IT strictly adheres to its curriculum on the current technology and standards so as to meet the everyday challenges in the industry. The course is offered in Full time and Distance & Blended mode.

2. RATIONALE

Information Technology is a developing and pressing field across the world, which makes a great choice for students to take an active role in changing life around them! Texila American University renders a cost-effective approach in Information Technology programs specifically designed with an objective of making students as IT Professionals.

3. AIM OF THE PROGRAMME

TAU Bachelor program in Information Technology envisage every student's pre-requisites and provides suitable technical training for the students to get placed in the well-established organization. The program gives in-depth knowledge about the practical aspects of Information technologies and few basic programming skills.

4. OBJECTIVES OF THE PROGRAMME

- Help the students to learn various computing skills and upgrade their technical skills.
- Helps the student to know about the various problem-solving skills using Information Technology resources.
- Helps the student to learn about the basic concepts of management and to get along with the team to obtain organizational goals.
- Helps the student to gain deep subject knowledge in the various domains of Information
 Technology

5. PROGRAM OUTCOMES

a. The students will be able to apply knowledge of computing and mathematics appropriate to the discipline.

- b. The students will be able to identify, analyse a problem and define the computing requirements appropriate to its solution.
- c. The students will be able to function effectively on teams to accomplish a common goal.
- d. The students will be able to understand professional, ethical, and social responsibilities.

6. LEVEL OF QUALIFICATION AND ARTICULATION IN THE ZAMBIA QUALIFICATIONS FRAMEWORK

ZQF level: 7

At this level, it is expected that the graduate shall:

- a) Gain knowledge and critical understanding of well-established principles of the emerging technologies, and of the way in which those techniques have developed.
- b) Develop the ability to apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of these principles in varied contexts.
- c) Gain knowledge of the main principles of computing and Information Technologies and ability to critically evaluate the appropriateness of different approaches in solving problems.
- d) Apply a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems in the field of Information Technologies.
- e) Effectively communicate information, arguments, and analysis, in a variety of forms, to various audiences.
- f) Present information, manage team, transfer knowledge, skills and values to others through delegation and practice.
- g) Develop existing IT skills and acquire new competencies to enable assumption of significant responsibility within organizations.
- h) Exercise personal responsibility, initiative and decision-making in complex and unpredictable contexts.
- Demonstrate some originality, innovativeness and creativity in formulating, evaluating and applying evidence-based solutions and arguments within the field of Information and Computing Technologies.

7. PROGRAM STRUCTURE- BACHELOR OF INFORMATION TECHNOLOGY

Specialization - Network Administration & Technology Development

YEAR	COURSE CODE	COURSE TITLE	CREDITS
1	BIT1211	Fundamentals of Computers	18
1	BIT1212	Computer Organization & Architecture	18
1	BIT1111	Communication Skills	18
1	BIT1112	Principles of Management	18
1	BIT1511	Capstone Project	12
1	BIT1113	Introduction to Global Culture and Ethics	18
1	BIT1114	Basic Mathematics and Statistics	18
2	BIT2211	Introduction to Operating System	18
2	BIT2212	Introduction to Database & MYSQL	18
2	BIT1512	Capstone Project	12
2	BIT2213	Installing, Configuring & Administration Windows Server	18
2	BIT2214	Introduction to Object Oriented programming & C++	18
2	BIT3222	Installing & Configuring Wi-Fi Network	18
2	BIT3223	Understanding Client Server Network	18
2	BIT2511	Capstone Project (Non Credit Course)	0
3	BIT2215	Java Programming	18
3	BIT2216	Spread Sheet Modelling & Analysis	18
3	BIT3221	Computer Hardware and Digital Electronic System	18
3	BIT3233	Open Sources Technologies	18
3	BIT2512	Capstone Project	12
3	BIT4232	Data base for Web	18
3	BIT3111	Research methods	18
4	BIT4221	Introduction to Data Sciences	18
4	BIT4222	Developing Digital Identity	18
4	BIT3511	Capstone Project	12
4	BIT4223	Enterprise Information and Storage Management	18
4	BIT3513	Article Review	6
4	BIT4511	Project	48
		Total Credits	480

${\bf Specialization \ - \ Multimedia \ \& \ Web \ Technology}$

YEAR	COURSE CODE	COURSE TITLE	CREDITS
1	BIT1211	Fundamentals of Computers	18
1	BIT1212	Computer Organization & Architecture	18
1	BIT1111	Communication Skills	18
1	BIT1112	Principles of Management	18
1	BIT1511	Capstone Project	12
1	BIT1113	Introduction to Global Culture and Ethics	18
1	BIT1114	Basic Mathematics and Statistics	18
2	BIT2211	Introduction to Operating System	18
2	BIT2212	Introduction to Database & MYSQL	18
2	BIT1512	Capstone Project	12
2	BIT2213	Installing, Configuring & Administration Windows Server	18
2	BIT2214	Introduction to Object Oriented programming & C++	18
2	BIT3222	Installing & Configuring Wi-Fi Network	18
2	BIT3223	Understanding Client Server Network	18
2	BIT2511	Capstone Project (Non Credit Course)	0
3	BIT2215	Java Programming	18
3	BIT2216	Spread Sheet Modelling & Analysis	18
3	BIT3231	Audio Video Processing	18
3	BIT3232	Computer Vision & Image Processing	18
3	BIT2512	Capstone Project	12
3	BIT3233	Open Sources Technologies	18
3	BIT3111	Research methods	18
4	BIT4231	Advanced Web Programming	18
4	BIT4232	Data base for Web	18
4	BIT3511	Capstone Project	12
4	BIT4233	Open Source Software Applications	18
4	BIT3513	Article Review	6
4	BIT4511	Project	48
		Total Credits	480

Specialization - Cyber Security & Social Computing

YEAR	COURSE CODE	COURSE TITLE	CREDITS
1	BIT1211	Fundamentals of Computers	18
1	BIT1212	Computer Organization & Architecture	18
1	BIT1111	Communication Skills	18
1	BIT1112	Principles of Management	18
1	BIT1511	Capstone Project	12
1	BIT1113	Introduction to Global Culture and Ethics	18
1	BIT1114	Basic Mathematics and Statistics	18
2	BIT2211	Introduction to Operating System	18
2	BIT2212	Introduction to Database & MYSQL	18
2	BIT1512	Capstone Project	12
2	BIT2213	Installing, Configuring & Administration Windows Server	18
2	BIT2214	Introduction to Object Oriented programming & C++	18
2	BIT3222	Installing & Configuring Wi-Fi Network	18
2	BIT3223	Understanding Client Server Network	18
2	BIT2511	Capstone Project (Non Credit Course)	
3	BIT2215	Java Programming	18
3	BIT2216	Spread Sheet Modelling & Analysis	18
3	BIT3241	Introduction to Forensic Tools & Technique	18
3	BIT3242	Introduction to Security Technologies	18
3	BIT2512	Capstone Project	12
3	BIT3243	Computer System Security	18
3	BIT3111	Research methods	18
4	BIT4241	Malicious Software & Security Programming	18
4	BIT4242	Design of Online Communities	18
4	BIT3511	Capstone Project	12
4	BIT4243	Computational Journalism	18
4	BIT3513	Article Review	6
4	BIT4511	Project	48
		Total Credits	480

8. TEACHING AND LEARNING PLAN

Texila American University Zambia is providing quality education with its state-of-the-art infrastructure, best learning methodology and technology enabled academic services.

- Uniquely Designed Learning Methodology
- Outcome Based Academic Delivery
- Continuous Academic Support
- Enhanced Learning Management Systems
- Technology Enabled Services
- Capstone Project, promote integrated learning and understand the connections between various subjects

MODE: Trimester Based - Online

Total 16 weeks in the Trimester (2 courses per trimester)

1 week for Exam, Result Declaration – 15 days after the completion of final exam.

CONTENT/MATERIAL:

4 Modules Per Course, 3 Units per Module & 6 (5-7) Chapters in each Unit = (4x3x6)= 72 Chapters

Instructional hours through University Campus: Per course 14 hrs (2hrs x 1days x 7 weeks)

Suggestive Lecture Duration: 1 Module in two Classes (2 hrs per class/ per week)

MODE: Block Based - Online

Total 8 weeks in the Block (1 course per Block)

1 week for Exam, Result Declaration – 12th week of the Block.

CONTENT/MATERIAL:

4 Modules Per Course, 3 Units per Module & 6 (5-7) Chapters in each Unit = (4x3x6)= 72 Chapters

Instructional hours: Per course 2 hours Webinar Session

Suggestive Lecture Duration: 4 Module discussion in 2 hours Webinar Session

9. ASSESSMENT AND EVALUATION POLICIES

On-Campus program is delivered in Semester pattern and On-line mode of program is delivered

in Trimester/Block pattern. A candidate must pass both formative assessment and summative assessment. Candidate should secure at least 50 % of total marks in internal as well as external examination to clear each course.

Assessment per Course	Weightage
Formative (Internal)	
4 MCQ Test	20%
Case Study/Assignment	20%
Total	40%
Summative (External)	
Final Exam (50 MCQ) Questions	60%
G.Total	100%

10. SCORING CRITERIA FOR CONTINUOUS ASSESSMENTS & EXAMINATIONS FOR THE B.SC PROGRAM

Grade	% Mark	Descriptor
Н	91-100	Honors. Exceptional performance demonstrating broad understanding of the subject area and excellent knowledge of the relevant literature. Exemplary discussion and analysis of results, logical organisation and ability to critically analyse and evaluate discuss concepts coupled with insight and originality.
A	81-90	Outstanding . Very good performance demonstrating evidence of wide reading, with clear presentation and thorough analysis & evaluation and an ability to critically evaluate and discuss the subject. Clear indication of some insight and originality. A very competent and well-presented work overall but failing short of excellence in some aspects.

В	71-80	Excellent . Good performance which shows good understanding of the subject and knowledge of the relevant literature. Efficient derivation of information with only minor slips. Demonstrates some relevant interpretation and critical evaluation of the subject. Good general standard of analysis, synthesis & interpretation of data.
С	61-70	Good. Satisfactory performance with clear presentation of subject and simple analysis but less effective evaluation of literature or synthesis of information. Requires some level of supervision but shows little ability to try and solve some problems unaided.
D	50-60	Fair. An average performance which shows some understanding of the subject but limited knowledge and appreciation of the relevant literature. Presentation of, analysis and presentation of results at basic level and showing little or no originality or critical evaluation. Insufficient attention to organisation and presentation of work.
F	0-49	Fail . A bad performance containing many errors and faults. Virtually no real understanding or appreciation of the subject and relevant literature pertaining to it. Chaotic presentation of information and in some cases incompletely presented and virtually non-existent or inappropriate or plainly wrong analysis. Discussion and interpretation seriously confused or wholly erroneous revealing basic misapprehensions.

11. FACILITIES FOR PROGRAMME DELIVERY

TAU has excellent facilities for the program delivery designed keeping in mind the needs of the student in all means.

Classroom:

All our classrooms are well equipped with Hi tech facilities like specially designed class room projector with computer with uninterrupted network connection. Our entire classrooms are centralized air-conditioned with good lighting. Comfortable seating arrangements are made for student's comfort. We have well equipped and designed computer laboratory with more than 60 computers and one dedicated Server connection for use. To strengthen our Information and Communication technology we have authorized CISCO networking systems.

Library:

TAU-Z has good number of relevant books for the students to refer and make use of the books for their

academic growth. A learning hub for students to satisfy their thirst for inquisitive knowledge and urge. Our huge database is filled with information which can easily help in your academic brilliance.

Learning Management System (LMS):

Learning Management System is the Academic Delivery platform for student, through which lecture contents, video lectures, learning resources, assessment, project submission, grading, etc. A Learning Management System (LMS) is a web-based application through which learning content is delivered and managed. An LMS is tied to on-line and off-line training, administration, and performance management and includes functionality for course catalogs, launching courses, registering learners, tracking learner progress and assessments. An LMS combines a front-end for the learner with a backend for administrators and instructors. This LMS seamlessly displays, in a browser interface, real-time information drawn from a database. It also allows for competency-driven assessment and course associations

Enterprise Resource Planning (ERP) Portal is Campus Management System, It manages enrolled students database, exam results, faculty details, student 's survey, calendar etc. All students are provided access to this portal for viewing followings: • Enrollment Status, Profile of the Student, Exam Results, Calendars, Invoice and Payment Status.

E-Conference:

F-Conference is an innovative platform which provides an excellent international forum for sharing knowledge and results. The E-Conference was conducted on the OPEN FORUM, the first of its kind. It includes Open forum, all accepted articles will be placed for discussion. Every article to be reviewed by other Authors or Reviewers. The Reviewers or Authors can place in their comments and views on the article as part of the discussion forum. The highlight of the Open forum discussion is that there is no time or place constraint.

E-Journal:

E-INTERNATIONAL JOURNALS OF ACADEMIC & SCIENTIFIC RESEARCH: EIJASR

our goal has been to go beyond borders in the field of academic research. There is an interactive platform where individuals can gain access to educational and scientific journals. Besides publishing journals related to various field of study, the EIJASR helps in indexing and calculation of impact factor of journals. This online journal website assists students in checking out the findings and scientific details of the latest technologies and diseases. It helps one to publish his or her findings and create

awareness about it in the scientific and medical field. There is a great shortage of platforms where one can publish his thesis or findings and it has led to various discoveries and cures being shelved up.

12. ENTRANCE REQUIREMENTS, CURRICULA AND DEGREE REGULATIONS

BIT- 4 Years Program:

- Five (5) O-Level credits or better; these must include English Language and Mathematics.
- Proficiency in English

Recognition of Prior Learning: BIT- 2 Years Program:

• Five (5) O-Level credits or better

(and)

* 3 years Diploma in relevant specialty from recognized university

(or)

- * 2 years Diploma in relevant specialty from recognized university with 3 years of work experience
- * Certificate (6 months) + Diploma (1.5 Years) in relevant specialization from recognized university with 3 years of work experience in relevant sector (accepted case to case)
- Proficiency in English

13. EXAMINATIONS

- Internal assessment comprises of 40 % and Final assessment comprises of 60% weightage.
- A candidate has to pass both internal assessment and external assessment.
- Candidate should secure at least 50 % of total marks in internal as well as external examination to clear each Course.

14. REFUND POLICY

- Non-refundable charges: Online application fee, Admission Processing charges, VISA Processing charges, Seat Deposit, Ancillary fees, Administrative Charges and all complementary benefits (if any) offered, are non-refundable.
- Fee paid towards the completed and current Trimester shall not be refunded.
- Student withdrawing before start of the program and have paid complete fees will be

refunded after deduction of non-refundable charges.

- Student withdrawing after start of the program and before completion of current Trimester and have paid fees will be refunded after deduction of the non-refundable charges and current semester fee.
- Student requesting for refund should submit formal request, which is subject to evaluation. Refund payable if any shall be processed as per refund policy.

15. CAREER PROGRESSION

Many opportunities exist in the expansive field of Information Technology nationally and globally, some of the career opportunities are as follows:

- System Analyst
- Programmer
- Database Administrator
- Tester
- Computer Support Specialist
- Hardware and Network Expert

16. DEGREE REGULATIONS

On successful completion of the program, the candidate will be awarded with the "Bachelor of Science in Information Technology" degree by Texila American University, Zambia.

