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HANDBOOK

DUT
DURBAN UNIVERSITY OF TECHNOLOGY
INYUVESI YASETHEKWINI YEZOBUCHWEPHESHE

FACULTY OF
ACCOUNTING
& INFORMATICS

INFORMATION
SYSTEMS

Faculty of Accounting & Informatics

Vision
A globally recognized faculty for academic excellence.

Mission
"Developing Leaders for the Information Society" through:
- Excellence in teaching and learning
- Relevant research and creative innovation
- Social entrepreneurship

Values
- **Fairness**: We treat people equitably with respect. Our decisions are impartial. We embrace diversity and inclusion.
- **Accountability**: We accept responsibility for activities, decisions, actions and disclose outcomes in a transparent way.
- **Integrity**: We enhance our reputation with consistent trustworthy conduct.

Department of Information Systems (IS)

Vision
To become a world recognised provider of Information Systems knowledge workers in a digital and information society.

Mission
To strive to enrich a student-centered experience through innovative technological programmes, cutting edge research that delivers tech-savvy solutions and ongoing engagement in the digital and information sector.

Values
- **Innovation:** To think out of the box. To strive for better. To apply cutting-edge curriculum, research and process. To be creative and exciting. To embrace collaboration.
- **Compassion:** To care and have empathy – to consider from another's perspective. To understand our students. To be ethical – do no harm. To be committed. uBuntu: "I am because we are".
- **Transformation:** To embrace the digital revolution. To be the architects of change. T o b e adaptive. To contribute to economic and societal progress - a mix of human and technological values.

Goals
The goals of the department are to:
- Produce adaptive graduates through relevant ICT programmes to advance a digital society.
- Transform society through significant ICT research that generates new knowledge and solutions.
- Be engaged and establish mutually beneficial partnerships in the community.

What is a University of Technology?

A university of technology is characterised by being research-informed rather than research-driven where the focus is on strategic and applied research that can be translated into professional practice. Furthermore, research output is commercialised thus providing a source of income for the institution. Learning programmes, in which the emphasis on technological capability is as important as cognitive skills, are developed around graduate profiles as defined by industry and the professions.

IMPORTANT NOTICE

The departmental rules in this handbook must be read in conjunction with the University's General Rules included in the Student Handbook. *The University reserves the right to change the contents without prior notice.*

NOTE TO ALL REGISTERED STUDENTS

Your registration is in accordance with all current rules of the Institution. If, for whatever reason, you do not register consecutively for every year/semester of your programme, your existing registration contract with the Institution will cease. Your re-registration anytime thereafter will be at the discretion of the Institution and, if permitted, will be in accordance with the rules applicable at that time.

CONTENTS   **Page**

1. DEPARTMENT AND FACULTY CONTACT DETAILS

All Departmental queries to:

Secretary: Ms W Xulu
Tel No: 031-373 5446
E-mail: winniex@dut.ac.za
Location of Department: 2nd Floor, Block B (East Wing) Ritson Campus

Faculty Queries: Ms D Small
Faculty Officer: Ms N Singh-Sakichand
Tel No: 031-373 5418
E-mail: deborahs@dut.ac.za
Location of Faculty office: West Wing, Hotel School, Ritson Campus

Executive Dean: Prof Oludayo O Olugbara
Secretary: Ms ML Phasha
Tel No: 031-373 5597
E-mail: Matladi@dut.ac.za
Location of Executive   North Wing, Hotel School Building, Ritson Campus
Dean's office

2.

STAFF	NAME	QUALIFICATION
Head of Department (Acting)	Dr Naicker N (Senior Lecturer)	PhD [UKZN]; MSc; BSc (Hons) [UNISA]; BSc [UNISA]; HED [SCE]
Senior Lecturers	Dr Chisita C	PhD (LIS) [UP]; MSc. (LIS) [NUST] BAECS; Higher Dip (LIS) [HPC]
	Gonsalves N	MA (OralityLiteracy Studies)[UND];BA (Hons)(Speech& Drama)[UDW];BA (Speech& Drama,ScienceofReligion) [UDW]; ND: IT[MLST]
	Dr Masenya TM	PhD (Information Science) [UNISA]; Masters in Information Technology [UP]; BA: Information Science (Hons) [UP]; BA: Information Science [UP]
	Dr Rajkoomar M	PhD (LIS) [DUT]; MIM [UNSW]; BBibl [UNISA]; BA [UNISA]; HED [UNISA]
	Dr Sentoo NR	DAdmin [UDW]; MBA [Buckinghamshire Chilterns University]; MIS [UN]; BA: Sociology (Hons) [UDW]; IS (Hons) [UN]; HD: LIS [UDW]; BA: Psychology & Sociology Majors [UDW]
Lecturers	Aroba O	MSc IT (Coventry University UK), BSc Comp. Sci & Tech (Crawford University)
	Dlalisa S	MCom IS&T [UKZN]; BTech: IT [MLST]; ND: IT [MLST]
	Dr Govender TP	PhD [UKZN]; MEd [UKZN]; BTech: IT [MLST]; BSc [UNISA]; HED [TCE]
	Khomo M	MTech [DUT]; BTech: LIS [DUT]; ND: LIS [MLST]
	Moonsamy D	MCom IS&T [UKZN]; BSc (Hons) [UNISA]; BSc [UNISA]; Dip Data Metrics [UNISA]

	Naicker E	MICT [DUT]; BTech: IT [DIT]; ND: IT [MLST]
	Dr Patel S	PhD (Electronic Engineering) [UKZN], BScEng (Electronic) [UKZN]
	Rajagopaul A	MTech [DUT]; BTech: LIS [DUT]; ND: LIS [DUT]
	Rakoma P	MTech [DUT]; BTech: LIS [DIT]; ND: LIS [MLST]
	Ramnarain A	MCom IS&T [UKZN]; BTech: IT [UNISA]; ND: IT [UNISA]
	Ramraj U	MBA [UDW]; BTech: Com Ad [MLST]; ND: BA [MLST]
	Zincume X	MCom IS&T [UKZN]; BTech: IT [DIT]; BTech: FIS [DIT]
South African Sign Language Interpreters	Mngadi S	BTech: TIP [DUT]; Dip: Mngt Science [DUT]; ND: TIP [DIT]
	Phakathi N	JPTD-Mpumalanga; Dip Rem Ed; BEd [Univ of Potch]
	Du Toit P (Deaf coordinator)	MA (Translation and Interpreting Studies) [WITS]
Administrative Staff		
Administrative assistant	Naidoo F	
Departmental secretary	Xulu W	BTech: OMT [DUT]; ND: OMT [DUT]
Senior Technician	Nepaul R	BTech: IT [DUT]; Computer Operators [MLST]; Certified Novell Administrator [Novell Education]; Computer Operator [CUC]

Technician	Mjoko N	BTech: BA [DUT]; ND: IT [DUT]; CompTIA A+ [Bytes]; CompTIA N+ [Bytes]; Conduct OBA [TLN Human Performance Systems Ltd]; ITIL 4 Foundation [Bytes]; Project Mngt [DUT]

3. PROGRAMMES OFFERED BY THE DEPARTMENT

Programmes are offered in this Department which, upon successful completion, lead to the awarding of the following qualifications:

INFORMATION AND COMMUNICATIONS TECHNOLOGY

Qualification Name	Qualification Code	SAQA NLRD	F level	F Credits
Diploma in ICT in Business Analysis	DIIBA1	97709	6	360

Students that qualify with the Diploma in ICT: BA are permitted to apply for programmes in the Department of Information Technology for articulation purposes.

NEW PROGRAMMES TO BE OFFERED IN 2023

Qualification Name	NQF level	NQF Credits
Higher Certificate Information and Communications Technology in Internet of Things (IoT)	5	124
Advanced Diploma Information and Communications Technology in Business Intelligence	7	128
Bachelor of Information and Communications Technology in Internet of Things (IoT)	7	360
Postgraduate Diploma in Information and Communications Technology	8	120
Masters of Internet of Things (Course Work)	9	180
PhD in Information Systems	10	360

LIBRARY AND INFORMATION STUDIES

Qualification Name	Qualification Code	SAQA NLRD	NQF level	NQF Credits
Diploma: Library and Information Studies	DILIS1	111835	6	380
Advanced Diploma in Library and Information Studies	ADLIS1	116407	7	120
Postgraduate Diploma in Library and Information Studies	Currently not available	-	8	-
Master of Management Sciences in Library and Information Science	MMLIS1	96837	9	180
PhD: Library and Information Science	PHDLIS1	96816	10	360
Phased-out Programmes			**Last new intake**	
ND: Library and Information Studies Four Year Extended Curriculum Programme	NDLIF2	N/A	2017 to complete by latest 2022	

The Library and Information Studies Programme provides graduates with scarce skills in cataloging, classification, indexing and abstracting. The skills enable students to be marketable for the workplace. The graduate possesses the ability to adapt to other library and information retrieval systems having been taught the core skills thoroughly in the programme (ORIA, ORIB and IRET modules).

4   PROGRAMME INFORMATION(Current offerings)

4.1   GENERAL
Student attendance
The department does not hold itself responsible for the recording of the attendance of its students.

Conduct of students in laboratories
Rules of conduct pertaining to all laboratories and lecture venues as instituted by the head of department, shall apply to all students.
- Eating, playing music, smoking or drinking in any lecture venue or laboratory is forbidden.
- Safety rules are to be strictly adhered to at all times.
- Mobile phones are to be switched off during lecture, laboratory and assessment sessions.

Course/year marks
- With reference to Rule G15, the calculation of the year/semester mark for each subject will be indicated within the learner guide of each subject.
- In addition to the general requirements for a year mark as stipulated in Rule G15, the department reserves the right to recommend at the end of a reasonable portion of the course that a student withdraws from the course, either due to poor performance in the majority of subjects or due to inadequate presentation of assigned work.
- A year/semester mark is valid only for the main examination in the year/semester in which a student is registered, plus the supplementary examination in that subject, if granted to the student in terms of Rule G16.

4.2   UNDER-GRADUATE PROGRAMMES
General Education
All undergraduate programmes at DUT include a General Education component which adds value by providing learning opportunities to help students think critically, develop values, understand traditions, respect diverse cultures and opinions, create an awareness of the environment and their role in protecting it, and most importantly, put that knowledge to use. The knowledge is holistic, not specialized; integrative, not fragmented.

In line with the embedded values of DUT (as outlined in the DUT Strategic Plan), the aim of General Education is: -
- To build a student-centred educational experience embedded in the local context.
- To prepare students for an increasingly diverse and complex globalized work environment.
- To cultivate an engaged and critical citizenry in the context of an emerging and fragile democracy in an ever-changing world order.

INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)

4.2.1   Diploma in ICT in Business Analysis (DIIBA1)

One of two streams in the Diploma in ICT, this qualification will develop knowledge and practiced skills for analyzing business and other environments to determine their needs and propose the best IT solution.

Duration
Min: 3 years; Max: 5 years

Career Opportunities
Business Analyst, Information Systems specialist, ICT Manager, Project Manager and Entrepreneur

4.3   MINIMUM ADMISSION REQUIREMENTS (ICT)

4.3.1 Diploma in ICT in Business Analysis (DIIBA1)

In addition to the requirements of the General Rules G7 and G21B, the minimum admission requirement is a National Senior Certificate (NSC) or Senior Certificate (SC) or a National Certificate Vocational (NCV) that is valid for entry into a Diploma, and must meet the following minimum requirements:

Compulsory Subjects	NSC Rating	SC		NCV
		HG	SG	
English (Home Language)	3	E	C	50 %
OR **English** (1st Additional Language)	4	n/a	n/a	n/a
Mathematics	3	E	C	50 %
OR **Mathematical Literacy**	6	n/a	n/a	n/a
Two 20 credit subjects (Life Orientation or more than one additional language is excluded)	3	n/a	n/a	(a) At least 50 % in one fundamental subject, in addition to English & Mathematics. (b) At least 60 % in three compulsory vocational subjects

Note: In addition to the above, the Department of IS can apply selection and ranking criteria based on academic merits and/or work experience before granting admission.

5. PROGRAMME RULES (Diploma offerings)

5.1 ITG1 UNSATISFACTORY ACADEMIC PROGRESS

The DUT General Rules G17* and G19* – G25* apply. In addition, the Department reserves the right to recommend that a student withdraws from a programme due to poor performance.

5.2 ITD2 PROGRESSIONRULES

5.2.1 Diploma in ICT in Business Analysis (DIIBA1)

In addition to General Rules G14, G16, G17 and G21B the student shall pass and accumulate the minimum number of credits at the end of each year, as indicated in the table below. This gives the student five years to complete the three-year qualification without intervention. Should a student not achieve the minimum credits indicated in the table below, he/she will not be permitted to register in the subsequent year.

- For a student to be progressed from study period one to study period two the student **must have passed at least two subjects** that belong to study period one.
- For a student to be progressed from study period two to study period three the **student must have passed at least three subjects** that belong to study period two.

END OF YEAR	MINIMUM CREDITS
1	50
2	120
3	200
4	280

For DIIBA1: A student will be able to register for third-year modules if they have passed all first-year majors (2), and 2 out of 4 second-year majors.

See section 6 of this handbook for majors.

5.3 INTERRUPTION OF STUDIES

Should a student interrupt his/her studies by more than three years the student will be required to provide evidence of appropriate knowledge which will be evaluated by the Department before being permitted to re-register.

5.4 ASSESSMENT RULES - FINAL MARK WEIGHTING

The final mark for a module with an examination is calculated as 40 % course mark and 60 % examination mark. The calculation of the course mark for each module will be indicated within the student guide of each module.

5.5 GENERAL EDUCATION MODULE RULES

The General Education modules are compulsory and cover 30 % of the total credits of an undergraduate Diploma and Degree programme.

5.6 PHASE-OUT SUBJECT RULES

Phase-out modules may not be offered both on a full-time and part-time basis.

5.7 PART-TIME SUBJECT RULES

Part-time students may have to write tests and/or examinations during full-time hours that is, during normal daytime working hours.

5.8 ARTICULATION INTO DIPLOMAS FROM HIGHER CERTIFICATE IT

Students who complete the Higher Certificate in IT are given the opportunity to apply for articulation into the Diploma in ICT APPLICATION DEVELOPMENT, the Diploma in ICT BUSINESS ANALYSIS and the Diploma in LIBRARY INFORMATION STUDIES.

For articulation into the Diploma in ICT in Business Analysis (DIIBA1), and Diploma in Library Information Studies (DILIS1) from the Higher Certificate Information Technology (HCINF1)

i.   Students are required to meet the University entrance requirements for a Diploma (G7 MINIMUM ADMISSION REQUIREMENTS)

ii.   Students must have passed all nine modules in the Higher Certificate in IT(HCINF1) programme at the first attempt in the first year of registration to

be considered for articulation into the Diploma in ICT in Business Analysis (DIIBA1), or the Diploma in Library Information Studies (DILIS1).

iii. A maximum of 15 % of the available space, as per the approved enrolment plan in each diploma will be allocated to students who graduated from the HCINF1 programme.

iv. Students will be ranked according to the aggregate mark obtained in the HCINF1 programme, and then by their final mark for Solutions Development.

v. Students need to apply directly to the Department after the release of second-semester results.

6. PROGRAMME STRUCTURE (ICT)

6.1.1 Diploma in ICT in Business Analysis (3 Year)

Note: * denotes Major module

Module Code	Module Name	Core; Fundamental; General Education	NQF Level	SAQA Credits	Exam/ CA	Prerequisites [P], Co-Requisites [C], Exposure [E]
YEAR 1 – SEMESTER 1						
CSTN101	Cornerstone 101	[GE] Inst.	5	12	CA	
ICTL101	Information & Communications Technology Literacy & Skills	[GE] Inst.	5	8	CA	
BFND101	Business Fundamentals I	[GE] Fac.	5	12	CA	
APDA101	Applications Development IA	[C]	5	12	Exam	
FCSC101	Fundamentals of Computer Security	[F]	5	8	Exam	
MWMU101	Me, My World, My Universe	[GE] Inst.	5	8	CA	
YEAR 1 - SEMESTER 2						
LWLF101	Law for Life	[GE] Inst.	5	8	CA	
APDB101	Applications Development IB	[C]	5	12	Exam	Applications Development IA [E]
FINA101	Financial Accounting I	[C]	5	12	Exam	
BSAP101	Business Analysis Project I*	[GE] Program	5	16	CA	
BSIS101	Business Information Systems I*	[C]	5	12	Exam	
YEAR 2 - SEMESTER 1						

BFND201	Business Fundamentals II	[GE] Fac.	6	12	CA	Business Fundamentals I [P]
BSAA201	Business Analysis IIA*	[C]	6	8	Exam	Financial Accounting I [P]
APDA201	Applications Development IIA	[C]	6	12	Exam	Applications Development IA [P]; Applications Development IB [P]
INMA201	Information Management IIA	[C]	6	8	Exam	
CABF201	Computer Applications in Business & Finance II	[C]	6	12	Exam	
BSIS201	Business Information Systems II*	[C]	6	8	Exam	Business Information Systems I [P]
YEAR 2 - SEMESTER 2						
THIA201	Theory of Internal Auditing II	[C]	6	8	Exam	
BSAB201	Business Analysis IIB*	[C]	6	8	Exam	Business Analysis IIA [E]
APDB201	Applications Development IIB	[C]	6	12	Exam	Applications Development IIA [E]
INMB201	Information Management IIB	[C]	6	8	Exam	Information Management IIA [E]
BSAP201	Business Analysis Project II*	[GE] Program	6	12	CA	Business Analysis Project I (P) Business Information Systems II [E]
ITPM101	IT project Management	[C]	6	12	Exam	
YEAR 3 - SEMESTER 1						
BSAA301	Business Analysis IIIA*	[GE] Program	7	16	Exam	Business Analysis IIA [P]; Business Analysis IIB [P]; Business Analysis Project II [E]
BISA301	Business Information Systems IIIA*	[C]	7	16	Exam	Business Information Systems II [P]
BAPA301	Business Analysis Project IIIA*	[GE] Program	6	16	CA	Business Analysis IIA [P]; Business Analysis IIB [P]; Business Analysis Project II [P]
TIPP301	Theory of ICT Professional Practice III	[C]	6	12	Exam	
YEAR 3 - SEMESTER 2						
ENSP101	Entrepreneurial Spirit	[GE] Fac.	6	12	CA	Business Fundamentals I [P]; Business Fundamentals II [P]

BSAB301	Business Analysis IIIB*	[GE] Program	7	16	Exam	Business Analysis IIIA [E]
BISB301	Business Information Systems IIIB*	[C]	7	12	Exam	Business Information Systems IIIA [E]
BAPB301	Business Analysis Project IIIB*	[GE] Program	6	20	CA	Business Analysis Project IIIA [E]; Business Analysis IIIA [E]

6.2 SUBJECT CONTENT ABRIDGED SYLLABI (ICT)

Applications Development 1A (APDA101) Introduction .Net Platform. Introducing the C# Programming Language. Getting started with .Net developing using C#. Language Essential. Expressions and Operators. Primer on Types and Objects. Simple Flow Control. Basics of Exception and Resource Management. Introduction Types. Methods. Introduction To Unit Testing	**Applications Development 1B (APDB101)** Fields, Properties & Indexers. Constructors and Finalizes Operators, Overloading and Conversions. Object-Oriented Programming. Generic Types and Methods Collection Types. Delegates. Events. Language Integrated Query Essentials. Exceptions. Working with IO.
Applications Development 2A (APDA201) Introduction to (a) development framework(s), Client-side languages for Web Development, Server-side languages for Web Development, Frontend Frameworks for Web Development, Backend Frameworks for Web Development, Web Development Tools.	**Applications Development 2B (APDB201)** Creating and managing Filters, controller Extensibility, creating and managing Views, Designing Model Templates, Model Binding, Model Validation, Creating Asynchronous Java Script Functions, Working with Java Script Frameworks, Security Vulnerability when developing applications, Authentication and Authorizing access to applications, Deployment.
Business Analysis 2A (BSAA201) Framework for Business Analysis and valuation using financial statements. Strategy Analysis. Implementing Accounting. Analysis Financial Analysis. Forecasting. Valuation Theory and concepts. Valuation Implementation	**Business Analysis 2B (BSAB201)** Business Analysis Planning and monitoring. Plan the execution of business analysis tasks. Update or change the approach to business analysis as required. Assess the effectiveness of and continually improve business analysis practices Enterprise Analysis. Identify and propose projects that meet strategic needs and goals. Elicitation. Explore, identify and document stakeholder needs. Requirements Analysis. Progressively elaborate stated requirements to a sufficient level of detail that accurately defines the business need within a specified scope. Validate requirements that meet the business need. Verify requirements are acceptable quality Solution Assessment and Validation. Assess solutions to ensure that strategic goals are met and requirements are satisfied using different methodologies viz. agile, waterfall, incremental, SDLC, etc. Requirements Management and Communication
Business Analysis 3A (BSAA301) Organisational business processes, terminology, concepts, and strategies related to demand management, procurement, planning, and materials requirements. An in-depth study in object-oriented systems analysis and design and UML. Role of the Business Analysis Consultant. Application of UML diagrams in business scenarios Case studies. Compile and execute a test plan to validate an ICT solution.	**Business Analysis 3B (BSAB301)** SAP as the Tool. Using IT for process management and improvement. Business process improvement and modelling software Tools of business process simulation. ERP systems. Organisational business processes, terminology, concepts, and strategies related to sales, material requirements planning, and capacity requirements planning. Use cases. Organizational issues in business process management. Understanding the customer Business process outsourcing. Managing processes that cross organizational borders. Case Studies.

Business Analysis Project 1 (BSAP101) Structure of Report. Executive Summary: Write this last. It's just a page or two of highlights. Company Description: Legal establishment, history, start-up plans etc. Product or Service: Describe what you're selling. Focus on Critical Citizenry in a business environment	**Business Information Systems 1 (BSIS101)** Basic Concepts- an introduction to business information systems. Selection of appropriate hardware for a BIS. Selection of appropriate software for a BIS. Networks, telecommunications and the Internet as related to a BIS Enterprise and functional BIS
Business Fundamentals 1 (BFND101) Efficiently manage key aspects of academic life Basic business communication, written and verbal. Information Literacy. Basic Business Finance	**Business Analysis Project 2 (BSAP201)** Strategies for creating a Portfolio of evidence. Creating a Portfolio of Evidence for a Business-related problem. Presentation of a Research-based Report Overview of a Feasibility study, requirements analysis and Specification Business
Business Information Systems 2 (BSIS201) An introduction to acquiring and developing BIS. Initiating systems development BIS project Management Systems Analysis Identifying the requirements. Focus on requirements determination in a lean or agile environment. The systems development life cycle. Systems analysis techniques, databases and user interface design. The relationship between analysis and design.	**Business Information Systems 3A (BISA301)** Information systems strategy. Information systems management Managing information security Providing end-user services. Ethical, legal and moral constraints on information systems
Business Analysis Project 3A (BAPA301) Identify the expected outcomes of a project. Provide a well-documented description of the problem to be addressed and why it is important. Indicate the expected outcomes of the project, preferably in measurable terms. Describe how long (days, months) specific tasks or components of the project will take. Construct a plan of action for how the objectives will be achieved. Draw up a checklist that provides the means to determine if the project has accomplished its objectives	**Business Information Systems 3B (BISB301)** The Internet, Intranets, and Extranets. E-commerce. Global Information Systems Enterprise Systems Management Support Systems Intelligent Information Systems' Emerging Trends, Technology and Applications
Business Analysis Project 3B (BAPB301) Understanding and application of concepts in business analysis. Developing a Business Case/Structure of a Business Case and Presentation of Business Case	**Business Fundamentals 2 (BFND201)** Introduction to research methodology (research terms and concepts e.g. qualitative; quantitative; research ethics; types of research). Business Communication. Societal consequences of technological developments Appropriate technologies for business practices Current social issues (Energy, Health and Agriculture)

Computer Applications in Business and Finance 2 (CABF201) Introduction to the functionalities of SMMEs and their roles in the economy. Core business processes of the financial components of SMMEs. Selection of appropriate applications to manage the business finances. Evaluating the feasibility of different business software. Applications. Legal, ethical, social, economic and political issues relating to business applications. Types and usesof business reports.	**Cornerstone 101 (CSTN101)** The module content will be developed around the concept of journeys, across time, across space, and across human relationships. It will take the journey of the Umgeni River (which is close to all DUT campuses) as a metaphor bringing different disciplinary perspectives to this content-environmental, historical and sociological in particular. The metaphor of the journey will be sustained across the module and will be applied to personal journeys, historical, political and environmental journeys, and social journeys, with a specific focus on gender. Each section will draw in issues of ethics, diversity and critical citizenry. The design team may later take a different metaphor or theme, but with the same outcomes and attributes. At each stage of the module, activities such as weekly online journeys and class discussions will involve reflection and build communicative practices. There will be a concluding section in which students will identify their learning and examine the implications for their roles as students and as citizens.
Entrepreneurial Spirit (ENSP101) Orientation to Entrepreneurial Spirit (Course Expectations). Spirit of Entrepreneurship. Operations. Project Management Team. Management Business and Finance. Investigating the Business Environment/Architecture Financing (Cost and Profit analysis, projected pro-forma statements, budgets, Working Capital Management and Capital. Budgeting) outcome 4. Marketing (Advertising, Promotions etc.) Risk Management. Entrepreneurial Case Study Analysis (Creativity enhancement). ICT Enablers (Excel, social media, M&E commerce)	**Financial Accounting 1 (FINA101)** Basic concepts in accounting Transactions. Ledger accounts. The accounting cycle Trial Balance. Presentation and disclosure of financial statements The adjusting and closing process. Applications of accounting systems Receivables and payables. Inventories. Cash equivalents. Non-current assets
Fundamentals of Computer Security (FCSC101) Basic Security Principles & Terms. System Security. Human & Physical Security. User Security. Malware. Policies/Procedures & Documentation. Basic Cryptography	**ICT literacy and Skills (ICTL101)** Basics of ICTs Hardware, Software, and Users. Internet Search. Word Processing. Spreadsheets
Information Management 2A (INMA201) Database systems. The Database Approach. Database Development. Process Database Alternatives. Database Models. Relational Models Characteristics. Database Design. Data Modelling with Entity Relationship Diagrams Data Modelling Advanced. Concepts Normalizing Database Designs. Introduction to Structured Query Language. The product of Owner Planning. A Serum Project. Project Reporting – Keeping Everything Visible. The Team. Scaling Projects using Serum Rules.	**Information Management 2B (INMB201)** Advanced Structured Query Language Implementation Alternatives Database Management
IT Project Management (ITPM101) Backdrop: The Science of Scrum. New Management Responsibilities The Scrum Master Bringing Order from Chaos The Product Owner Planning a Scrum Project Project Reporting— Keeping Everything Visible The Team. Scaling projects using ScrumRules.	**Law for Life (LWLF101)** Introduction. Civil and criminal law. Law of insurance. Road accident fund. Law of contract. Marriage. Succession.
Me, My World, My universe (MWMU101) The module will be developed within the context of decision making and the consequences of these on the self, the world and the universe. The module will start with a "refresher" on the appropriate mathematical	**Theory of ICT Professional Practice 3 (TIPP301)** Organizational structure. Communication Skills. Skills of ethical analysis. Professional Ethics and Social. Responsibility Elements of social analysis. Intellectual Property. Information Privacy. Responsibility of a

computations and solving of simple, single context applications in the following areas of mathematics: Numbers and Operations, Functional Relationships. Space, Shape, Measurement and Data Handling Broader issues involving the quantitative literacies/reasoning will be addressed by examining relevant/current case studies within the themes indicated above. Not all themes may be addressed in a particular year. But at least two issues will be analysed and discussed from a quantitative reasoning perspective.	computer professional
Financial Literacy (ECP) Reading statements from financial institutions. Managing a cheque account. Using electronic banking services. Recognizing the range of saving options. Calculating interest and understanding compound interest. Establishing and using credit. Repairing poor credit. Ordering and reading a credit report. Securing loans. Identifying expenses Identifying and assessing assets and debts. Avoiding money drainers (check-cashing operations, rent-to-own stores, predatory lending). Understanding the proposed and actual costs of owning or leasing a car. Financial planning for different stages on the family life cycle or life events — getting married or living together, separation or divorce, having children, personal or family illness or disability, buying a home, retirement, sending children to college, losing a job, death of a partner or family member. Reading a pay cheque — what is the difference between gross pay and net pay. Decision-making and problem-solving. Identifying values. Managing risk. Understanding tax obligations. Learning how to avoid tax penalties, underpayment, or overpayment. Knowing what to look for when buying a home. Dealing with mortgage lenders. Identifying affordable homeownership programs available to low-income workers	**Business Communication Skills (ECP)** Establishing a framework for business communication Ethical, legal, cultural and global issues affecting communication. Understanding the reporting process. Organizing and designing business reports. Communicating electronically Designing and delivering business presentations
Business Analysis Skills 1 A (ECP) Understanding the situation. Defining the question. Structuring the problem. Creating a work plan Brainstorming, mind mapping. Modelling. Interviews Evaluating Alternatives. Proving your recommendation. Planning implementation. Calculating financial impact Crafting a storyline. Saying it with charts. Preparing a dummy pack. Handling Q&A. Delivering the presentation.	**Business Analysis Skills 1 B (ECP)** Understanding the need for data analysis Data collection techniques Data Cleaning Techniques Formulas and Functions in Excel Handling Data using Lookups in Excel Introduction to Statistics in Excel Using Charts and Pivot tables in Excel
Business Analysis 2 A Augmented (ECP) Framework for Business Analysis and valuation using financial statements. Strategy Analysis. Problem-solving techniques. Affinity diagrams encourage students (either in a group or as individuals) to organize ideas into a common theme. Brainstorming encourages students (either in a group or as individuals) to generate a large number of ideas to solve a problem or to find ways of solving the problem. Implementing Accounting Analysis. Financial Analysis Forecasting. Valuation Theory and concepts. Valuation Implementation.	**Business Analysis 2 B Augmented (ECP)** Business Analysis Planning and Monitoring Plan the execution of business analysis tasks Update or change the approach to business analysis as required. Assess the effectiveness of and continually improve business analysis practices. Enterprise Analysis Problem-solving techniques. Flowcharts are used to help students identify the aspects they do not understand with respect to content before attempting to teach problem-solving skills. The 'five why's technique' encourages students to ask at least five questions when solving a problem, which helps them to think 'out of the box'. Requirements Analysis. Solution Assessment and Validation. Requirements Management and Communication. Facilitate enterprise consistency and efficiency by re-using requirements whenever possible.

7. LIBRARY AND INFORMATION STUDIES (LIS)

7.1 UNDERGRADUATE PROGRAMMES

7.1.1 Diploma in Library and Information Studies (DILIS1)

The Diploma in Library and Information Studies replaces an existing qualification (National Diploma in Library and Information Studies). This qualification has been designed in line with the technological developments and new trends in bibliographic control and metadata developments in terms of tools and current practices in the Library and Information Science/Studies (LIS) sector.

Duration
Min: 3 years; Max: 4 years

7.1.2 Advanced Diploma: Library and Information Studies –ADLIS1

In addition to the requirements of G7, and G21B, the minimum entrance requirements are: the applicants should have a three-year National Diploma or Diploma in Library and Information Studies or related qualifications in NQF Level 6, with a minimum of 60 % in all third year major modules in the National Diploma/Diploma.

OR

The applicant should have a three National Diploma or Diploma in Library and Information Studies or related qualifications in NQF Level 6 with a minimum of two years' work experience in the library and information sector.

For international qualifications that have been evaluated by SAQA and meet or exceed the minimum requirements outlined above.

7.2 POSTGRADUATE RESEARCH PROGRAMMES

7.21 Master of Management Sciences in Library and Information Science

Entrance to this higher qualification is a B.Tech: Library and Information Studies (or NQF Level 8 qualification in the LIS field). The minimum duration of study is one year full-time or two years part-time.

Duration

Min: 1 year

7.2.2 Doctor of Philosophy in Library and Information Science

Entrance to this higher qualification is an MTECH OR Masters Library and Information Studies/Science (or its equivalent). This is an advanced qualification and is based on research with a study duration of a minimum of two years full-time. Registration is only completed when the Institution's Research Committee accepts the research proposal.

Duration

Min: 2 years

7.3 MINIMUM ADMISSION REQUIREMENTS(LIS)

7.3.1 Diploma in Library and Information Studies (3 Year)

In addition to the requirements of G7, and G21B the minimum entrance requirements are:

Compulsory Subjects	NSC Rating	SC		NCV
		HG	SG	
English Home language	3	E	D	50 %
English First Additional	4			
Mathematics OR **Mathematical Literacy**	3 4	E	D	
	Four (4) other 20 credit subjects (excluding Life Orientation). Not more than two Languages. Minimum Level 3	Four (4) best subjects, including English and One (1) additional Language.	Four (4) other best subjects, including English and One (1) additional Language.	At least 50 % in three fundamental subjects including English At least 60 % in three compulsory vocational subjects

	for these 4 subjects.			

Note: In addition to the above requirements, the Programme will apply a ranking criteria based on academic merit. Mature age applications will be considered based on library and information sector experience.

Suitable Candidate Selection
All applications must apply through the Central Applications Office (CAO).

8. PROGRAMME RULES

8.1 UNSATISFACTORY ACADEMIC PROGRESS

Students who do not meet the progression rules listed above, will be regarded as having Unsatisfactory Academic Progress, and will not be permitted to continue with the diploma unless an appeal to continue is upheld, (refer to G1 (8) for appeals). In order to progress from one study level to the next, a student would need to accumulate a minimum number of credits as indicated in the table above. Students achieving below the threshold would be considered as making unsatisfactory academic progress and would be excluded.

8.2 PROGRESSION RULES

8.2.1 Diploma in Library and Information Studies

Promotion to the higher level of study will be governed by the progression rules prescribed by the pre-requisites. All modules would have a minimum pass mark of 50%. In addition to the prerequisite, co-requisite and requirements of the individual modules, the student needs to:

- **Pass all 1st AND 2ND year modules** to progress to 3rd Year.
- **Pass the three major modules** (Organisation and Representation of Information; Library and Information Practice and Information and Communications Technology) in 1st year to do the major modules in 2nd year. Auxiliary modules may be done in 2nd year if a student is repeating 1st year modules

The student shall pass and accumulate the minimum number of credits at the end of each year of registration, as indicated in the table below:

END OF YEAR	MINIMUM CREDITS
1	60
2	120
3	240
4	300

This gives the student four years to complete the three-year qualification without intervention. At the end of any year, if the student has not met the progression rules, he/she may appeal etc. At the end of the fourth year, when the student appeals, the HoD would evaluate the student's progress to see if there is a reasonable chance of the student completing in the maximum time and use this to make a decision. This is in line with the requirements of rule QG 17.

8.3   WORK-INTEGRATED LEARNING (WIL)

Students will only be eligible for WIL placements in the second level of study after passing Library and Information Professional 1A. Students will only be eligible for WIL placements in the third level of study after passing Library and Information Professional 1A & 1B as well as Library and Information Professional Practice 2A. Assessment methods will be: confidential reports; individual WIL reflective essays and reports; oral presentations and PowerPoint presentations (3rd-year students). Monitoring procedures include visits by academic staff or/telephone interviews.

8.4 INTERRUPTION OF STUDIES

In accordance with Rule G21A(b), the minimum duration for this programme will be 3 years/6 semesters of registered study and the maximum duration will be 4 years/8 semesters of registered study. Should a student interrupt his/her studies by more than three (3) years, he/she will need to apply to the department for permission to re-register and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration.

8.5   ASSESSMENT RULES

Refer to the General Rules, page 26, G13 (K) – Assessment

8.6   ELIGIBILITY FOR EXAMS

In addition to rule G12(1) a sub-minimum of 40% is required for all subjects in which the semester mark is made up of.

(as per G12 rules).

8.7 ACADEMIC INTEGRITY

Refer to the DUT General Rules pertaining to academic integrity G13 (1) (0), on falsification of academic records, plagiarism and cheating. These will be enforced to safeguard the worthiness of our qualifications, and the integrity of the Faculty of Accounting and Informatics at DUT.

8.8 GENERAL EDUCATION MODULES

Stand-alone General Education modules will comprise of:

- 3 Compulsory Faculty General Education modules
- 2 Institutional General Education modules
- 1 Elective Faculty General Education module

8.9 ARTICULATION INTO DIPLOMAS FROM HIGHER CERTIFICATE IT (REFER TO RULE 5.8)

9. PROGRAMME STRUCTURE (LIS)

9.1 Diploma in Library and Information Studies (DILIS1)
The Diploma in Library and Information Studies is a full-time qualification and is over three years. The table below shows the structure of the curriculum.

Name of subject	Subject Code	Study Level	HEQSF Level	Module Credits	C/E*	Pre-Req.	Co-Req.	Exam**
Business Fundamentals 1	BSFD101	I	6	12	C	Nil	Nil	No
Organisation and Representation of Information 1A	ORIA101	I	6	16	C	Nil	Nil	Yes
Communication in English 1	CENL101	I	5	12	C	Nil	Nil	No
Afrikaans or isiZulu	CAFR101 CZUL101	I	5	12	C	Nil	Nil	Yes
Cornerstone 101	CSTN101	I	5	12	C	Nil	Nil	Yes
Name of subject	**Subject Code**	**Study Level**	**HEQSF Level**	**Module Credits**	**C/E***	**Pre-Req.**	**Co-Req.**	**Exam****
Organisation and Representation of Information 1B	ORIB101	I	5	12	C	Nil	Nil	Yes
Integrated Human Studies	IHST101	I	5	12	C	Nil	Nil	Yes
Introduction to Technopreneurship (Institutional)	ITCH101	I	5	8	C	Nil	Nil	No
Information and Communications	ICTC101	I	6	16	C	Nil	Nil	Yes

Technology								
Library and Information Practice 1								
Name of subject	Subject Code	Study Level	HEQSF Level	Module Credits	C/E*	Pre-Req.	Co-Req	Exam**
Library and Information Practice 2	LFPR201	2	6	12	C	Library and Information Practice 1; Information and Communication 1 AND Organisation of Information 1A & 1B	Nil	Yes
Information and Communications Technology 2A	ICTA201	2	6	12	C	Library and Information Practice 1; Information and Communication 1 AND Organisation of Information 1A & 1B	Nil	Yes
Organisation and Representation of Information 2A	ORIA201	2	6	12	C	Library and Information Practice 1; Information and Communication 1 AND Organisation of Information 1A & 1B	Nil	Yes
User Studies	USRS101	2	6	16	C		Nil	Yes
Library and Information Professional Practice 1A	LPPA101	2	6	16	C	Library and Information Practice 1; Information and Communication 1 AND Organisation of Information 1A & 1B	Nil	No
Name of subject	**Subject Code**	**Study Level**	**HEQSF Level**	**Module Credits**	**C/E***	**Pre-Req.**	**Co-Req.**	**Exam****
Organisation and Representation of Information 2B	ORIB201	2	6	8	C	Library and Information Practice 1; Information and Communication 1 AND Organisation of Information 1A & 1B)	Nil	Yes
Organisation and Social Psychology	ORSP101	2	6	12	C	Nil	Nil	Yes
Library Marketing and Promotion	LMKP101	2	6	12	C	Nil	Nil	No
Library and Information Professional Practice 1B	LPPB101	2	6	12	C	Nil	Nil	No
Business Fundamentals 2	BSFD201	2	6	12	C	Business Fundamentals 1	Nil	No
Name of subject	Subject Code	Study Level	HEQSF Level	Module Credits	C/E*	Pre-Req.	Co-Req	Exam**
Library and Information Practice 3A	LIPA301	3	7	16	C	Library and Information Practice 1; Organisation ad Representation of Information 1A & 1B; Information and Communication Technology 1;Integrated Human Studies; Communication in English 1; Afrikaans or IsiZulu; Cornerstone 101; Introduction to Technopreneurship; Business Fundamentals 1; Library and Information Practice 2; Information and Communication 2A; Information and Communication 2B; Organisation and Representation of Information	Nil	Yes

Module	Code					Prerequisites		
						2A; Organisation and Representation of Information 2B; User Studies; Organisation and Social Psychology; Library and Information Professional 1A; Library and Information Professional 1B; Business Fundamentals 2		
Organisation and Representation of Information 3A	ORIA301	3	7	8	C	Library and Information Practice 1; Organisation ad Representation of Information 1A & 1B; Information and Communication Technology 1;Integrated Human Studies; Communication in English 1; Afrikaans or IsiZulu; Cornerstone 101; Introduction to Technopreneurship; Business Fundamentals 1; Library and Information Practice 2; Information and Communication 2A; Information and Communication 2B; Organisation and Representation of Information 2A; Organisation and Representation of Information 2B; User Studies; Organisation and Social Psychology; Library and Information Professional 1A; Library and Information Professional 1B; Business Fundamentals 2	Nil	Yes
Information and Communications Technology 3A	ICTA301	3	6	12	C	Library and Information Practice 1; Organisation ad Representation of Information 1A & 1B; Information and Communication Technology 1;Integrated Human Studies; Communication in English 1; Afrikaans or IsiZulu; Cornerstone 101; Introduction to Technopreneurship; Business Fundamentals 1; Library and Information Practice 2; Information and Communication 2A; Information and Communication 2B; Organisation and Representation of Information 2A; Organisation and Representation of Information 2B; User Studies; Organisation and Social Psychology; Library and Information Professional 1A; Library and Information Professional 1B; Business Fundamentals 2	Nil	Yes
Library and Information Professional Practice 2A	LPPA201	3	6	16	C	Library and Information Practice 1; Organisation ad Representation of Information 1A & 1B; Information and Communication	Nil	No

Name of subject	Subject Code	Study Level	HEQSF Level	Module Credits	C/E*	Pre-Req.	Co-Req	Exam**
						Technology 1; Integrated Human Studies; Communication in English 1; Afrikaans or IsiZulu; Cornerstone 101; Introduction to Technopreneurship; Business Fundamentals 1; Library and Information Practice 2; Information and Communication 2A; Information and Communication 2B; Organisation and Representation of Information 2A; Organisation and Representation of Information 2B; User Studies; Organisation and Social Psychology; Library and Information Professional 1A; Library and Information Professional 1B; Business Fundamentals 2		
Community Engagement	CENG101	3	6	8	C	Library and Information Practice 1; Organisation ad Representation of Information 1A & 1B; Information and Communication Technology 1;Integrated Human Studies; Communication in English 1; Afrikaans or IsiZulu; Cornerstone 101; Introduction to Technopreneurship; Business Fundamentals 1; Library and Information Practice 2; Information and Communication 2A; Information and Communication 2B; Organisation and Representation of Information 2A; Organisation and Representation of Information 2B; User Studies; Organisation and Social Psychology; Library and Information Professional 1A; Library and Information Professional 1B; Business Fundamentals 2	Nil	Yes
Name of subject	Subject Code	Study Level	HEQSF Level	Module Credits	C/E*	Pre-Req.	Co-Req	Exam**
Library and Information Practice 3B	LIPB301	3	7	8	C	Library and Information Practice 1; Organisation ad Representation of Information 1A & 1B; Information and Communication Technology 1;Integrated Human Studies; Communication in English 1; Afrikaans or IsiZulu; Cornerstone 101; Introduction to Technopreneurship; Business Fundamentals 1; Library and Information Practice 2; Information and Communication 2A; Information and Communication 2B; Organisation and Representation of Information 2A; Organisation and	Nil	Yes

						Representation of Information 2B; User Studies; Organisation and Social Psychology; Library and Information Professional 1A; Library and Information Professional 1B; Business Fundamentals 2		
Organisation and Representation of Information 3B	ORIB301	3	7	12	C	Library and Information Practice 1; Organisation ad Representation of Information 1A & 1B; Information and Communication Technology 1;Integrated Human Studies; Communication in English 1; Afrikaans or IsiZulu; Cornerstone 101; Introduction to Technopreneurship; Business Fundamentals 1; Library and Information Practice 2; Information and Communication 2A; Information and Communication 2B; Organisation and Representation of Information 2A; Organisation and Representation of Information 2B; User Studies; Organisation and Social Psychology; Library and Information Professional 1A; Library and Information Professional 1B; Business Fundamentals 2	Nil	Yes
Information and Communications Technology 3B	ICTB301	3	6	12	C	Library and Information Practice 1; Organisation ad Representation of Information 1A & 1B; Information and Communication Technology 1;Integrated Human Studies; Communication in English 1; Afrikaans or IsiZulu; Cornerstone 101; Introduction to Technopreneurship; Business Fundamentals 1; Library and Information Practice 2; Information and Communication 2A; Information and Communication 2B; Organisation and Representation of Information 2A; Organisation and Representation of Information 2B; User Studies; Organisation and Social Psychology; Library and Information Professional 1A; Library and Information Professional 1B; Business Fundamentals 2	Nil	Yes
Library and Information Professional Practice 2B	LPPB201	3	6	16	C	Library and Information Practice 1; Organisation ad Representation of Information 1A & 1B; Information and Communication Technology 1;Integrated Human Studies; Communication in English 1; Afrikaans or IsiZulu;	Nil	No

						Cornerstone 101; Introduction to Technopreneurship; Business Fundamentals 1; Library and Information Practice 2; Information and Communication 2A; Information and Communication 2B; Organisation and Representation of Information 2A; Organisation and Representation of Information 2B; User Studies; Organisation and Social Psychology; Library and Information Professional 1A; Library and Information Professional 1B; Business Fundamentals 2	
ICT Innovation and Emerging Technologies	INET101	3	6	12	C	Library and Information Practice 1; Organisation ad Representation of Information 1A & 1B; Information and Communication Technology 1;Integrated Human Studies; Communication in English 1; Afrikaans or IsiZulu; Cornerstone 101; Introduction to Technopreneurship; Business Fundamentals 1; Library and Information Practice 2 Information and Communication 2A; Information and Communication 2B; Organisation and Representation of Information 2A; Organisation and Representation of Information 2B; User Studies; Organisation and Social Psychology; Library and Information Professional 1A Library and Information Professional 1B; Business Fundamentals 2	

9.2 Advanced Diploma: Library and Information Studies (ADLISI)

The modules that are offered are as follows:

Semester One

Module Code	Module Name	NQF Level	Credits
INCT401	Information and Communication Technology	7	12
OROI401	Organisation & Representation of Information	7	16
RMAN401	Records Management	7	16
PACL401	Preservation and Conservation in Libraries	7	16

Semester Two

Module Code	Module Name	NQF Level	Credits
ADLS401	Advanced Literature Studies	7	16
DILI401	Digitization in Libraries	7	16
KNMA401	Knowledge Management	7	12
RMHD401	Research Methodology	7	16

POSTGRADUATE RESEARCH PROGRAMMES

9.3 Master of Management Sciences in Library and Information Science (MMLIS10)

	NQF level	Pre-requisite/Co-requisite
THIS IS A THESIS-BASED QUALIFICATION	9	BTech or equivalent (NQF level 8)

9.4 PhD: Library and Information Science (DPLIS1)

	NQF level	Pre-requisite/Co-requisite
THIS IS A THESIS-BASED QUALIFICATION	10	MTech/Master or Equivalent

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