



UNIVERSITY OF DAR ES SALAAM
OFFICE OF DEPUTY VICE CHANCELLOR-RESEARCH
Directorate of Public Services-Continuing Education Unit



COURSE
CATALOGUE



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COURSE CATALOGUE

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ABOUT CONTINUING EDUCATION UNIT (CE)

Welcome to the University of Dar es Salaam, welcome to the Directorate of Public Services Continuing Education Unit (CE).

The Continuing Education Unit (CE) is a Unit created to provide professional demand driven quality continuing education services to its stakeholders in the region and the country.

The main mission of the CE is to coordinate, facilitate and promote demand-driven quality continuing education programmes, and services to UDSM internal and external markets.

To achieve its mission the CE undertakes the following functions:

- Conduct demand-driven Continuing Education Programmes to UDSM staff and external clientele;
- Provide quality assurance and control of CE courses for the entire University;
- Carry out systematic training Needs Assessment of the external markets;
- Develop affordable Continuing Education programmes that are highly responsive to specific needs of carefully identified market niches;
- Develop and maintain an up-to-date database of available CE programmes/courses and available human resource capacity for the identified CE activities; and
- Promote and Market Continuing Education capacities of the University.

In continuing to provide top notch continuing education to our clients, the Continuing Education Unit has produced a short course catalogue to highlight some of the highly demanded short courses of the University of Dar es Salaam.

We hope in this course catalogue you will be able to find a course that meets your expectations. These courses have been created to arm you with critical skills and knowledge that are important in today's diverse job market. Our courses provide you with real-world experience so that you can immediately take your new knowledge and skills and apply them in your surroundings. This course catalogue will be available online (UDSM website) and at the University of Dar es Salaam.

Facilities and Services

Most of our trainings are conducted at the CE Unit training facility located at the UDSM Mlimani Campus which has a well-equipped and modern conference hall, computer and internet services, printing and photocopying facilities. However, with the current competitive environment, arrangements can be made for outside training programmes.

Duration of the courses

Most of our Short courses are run for five intensive days. But we have few that are two to three

Days long. Through hands-on exercises, interactive lectures, Presentations and dynamic group discussions you'll learn strategies, techniques, and skills that will engage and inspire you to new heights.

Medium of Instruction

English and Kiswahili languages will be used in the Courses.

Course Cost

Courses that are conducted for five days will cost 600,000/= . This includes facilitation, course materials and refreshments. Courses that range between two to three days, cost will range between 300,000/= to 450,000/= . This includes facilitation, course materials and refreshments. Come and explore our vast offerings and find the right course to meet your professional and personal demand. Let your future begin by enrolling in the University of Dar es Salaam Continuing Education Courses and we hope this course catalogue will be an essential tool for your professional development.

1.0 GENERAL MANAGEMENT



- 1.1 STRATEGIC SKILLS FOR ADMINISTRATIVE PROFESSIONALS
- 1.2 PUBLIC RELATIONS AND COMMUNICATION SKILLS
- 1.3 CUSTOMER CARE FOR FRONT OFFICE MANAGERS/OFFICERS
- 1.4 ENHANCING WORK ETHICS AND BEHAVIOUR IN ORGANIZATIONS
- 1.5 CORPORATE GOVERNANCE AND EFFECTIVE BOARD CONTROL
- 1.6 EFFECTIVE COMMUNICATION SKILLS FOR LEADERSHIP AND MANAGERS
- 1.7 MANAGING ORGANIZATIONAL EFFECTIVENESS

1.1 STRATEGIC SKILLS FOR ADMINISTRATIVE PROFESSIONALS

COURSE OBJECTIVES

To impart participants with basic concepts of strategic management and their implication to administrative personnel.

KEY TOPICS

- Concepts of strategic management;
- Strategy and its implication;
- Organizations strategic direction;
- Strategies and techniques of improving performance; and
- Accelerated personal, interpersonal and teamwork skills.

LEARNING OUTCOME

By the end of the course participants will be able to:

- Mention the basic concepts of strategic management;
- Understand strategy and its implication to administrative personnel;
- Understand organizations strategic direction and what it means to administrative personnel; and
- Provide accelerated personal, interpersonal and teamwork skills and to apply them to administrative personnel.

TARGET PARTICIPANTS

Management Associates, Administrative Assistants, Office Managers, Personal and Executive Assistants.

1.2 CUSTOMER CARE FOR FRONT OFFICE MANAGERS/OFFICERS

COURSE OBJECTIVES

Customer care is critical to any public or private enterprise. This course intends to transform employees working culture and improve the organization's image. It is tailored to provide staff with skills essential for protecting corporate image while maintaining highest levels of professionalism. It will also improve the relationship between internal and external customers, customer retention and satisfaction, and organizational value.

KEY TOPICS

- Customer care and the role it plays in the Organization;
- Current issues and best practices in customer care management; and
- Strategies and techniques of providing exceptional customer service.

LEARNING OUTCOME

By the end of the course participants will be able to:

- Create a winning environment for their organizations;
- Improve relationship between internal and external customers;
- Provide integrated personal, interpersonal and teamwork skills;
- Develop mentoring skills; and
- Be in a better position to manage customer relations in their organizations.

TARGET PARTICIPANTS

The course targets people with close contact with customers. These include front Desk Officers, Supervisors, Bank Tellers, and Secretaries among others.

1.3 ENHANCING WORK ETHICS AND BEHAVIOUR IN ORGANIZATIONS

COURSE OBJECTIVES

This course introduces participants to various ethical concepts and theories related to practice in their professions. The course aims at creating a culture of continuous improvement, fostering high moral standards and developing a spirit of service and respect to others based on knowledge, freedom and responsibility.

KEY TOPICS

- Work place ethics;
- Conceptualized and contextualized ethics codes;
- Values and ethical programmes;
- Ethics, team work and public image;
- Ethical programme and how to deal with its challenges;
- Ethical styles and how to address and resolve ethical dilemma; and
- Code of conduct.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Understood what work place ethics encompasses;
- Conceptualize and contextualize ethics codes, values and ethical programmes;
- Understand how ethics affect team work and public image;
- How to set up and implement an ethical programme, and how to deal with its challenges;
- Explore different ethical styles and learn how to address and resolve ethical dilemmas; and
- Guidelines to create an effective code of conduct.

TARGET PARTICIPANTS

Executives, Managers, Directors and supervisors in public and Private institutions.

1.4 CORPORATE GOVERNANCE AND EFFECTIVE BOARD CONTROL

COURSE OBJECTIVES

This course offers insight into the world of corporate governance, risks, and control. The course offers an overview of the interaction among management, the board and all other stakeholders.

KEY TOPICS

- Transparency and accountability;
- The role and responsibilities of the governing Board of Directors;
- Elements of an effective code of conduct;
- Internal control, role & responsibilities of management and key monitoring activities; and
- Roles and responsibilities of independent public accountants, counsel and regulatory bodies.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- How Boards of Directors in a modern corporate entity ought to act;
- The role and the responsibilities of the governing Board of Directors;
- Elements of an effective code of conduct;
- Internal controls, roles and responsibilities of management and key monitoring activities;
- Roles and responsibilities of independent public accountants, counsel and regulatory bodies; and
- Application in the broader corporate context to ensure effectiveness, transparency and accountability in public and private institutions.

TARGET PARTICIPANTS

This course is specifically tailored to senior corporate Managers, Board members, Leaders in the central and local government, Senior Personnel in private and public entities.

1.5 EFFECTIVE COMMUNICATION SKILLS FOR LEADERS AND MANAGERS

COURSE OBJECTIVES

Development of effective communication skills course has been driven by the current competitive environment whereas effective communication has become one of the critical factors for enhancing productivity and performance in organizations, whether public or private.

KEY TOPICS

- Communication styles and processes;
- Effective communication to business/organizational improvement;
- Business /organizational aims and objectives;
- Verbal and nonverbal communication skills;
- Motivation to work; and
- Trust and confidence.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Understand what makes communication effective and develop different communication styles and processes to use with them;
- Make workplace meetings, reports and communications effective, and link effective communication to business /organizational improvements;
- Develop ability to communicate business/organizational aims and objectives clearly and professionally;
- Develop clear and effective verbal and nonverbal communications skills to remove barriers and poor communication;
- Improve motivation to work through effective communication; and
- Develop and promote trust and confidence.

TARGET PARTICIPANTS

This course is specifically tailored to Managers and professionals in the public and private sector at all levels seeking to become better communicators.

1.6 MANAGING ORGANIZATIONAL EFFECTIVENESS

COURSE OBJECTIVES

The overall objective of the course is to enable participants identify their own leadership style in the workplace. They will also acquire skills and knowledge on appropriate behavioural responses to enhance commitment and cooperation from others and hence optimize organization effectiveness. The course enables managers to achieve improved organizational effectiveness by increasing self-awareness, roles, functions, and responsibilities of successful managers.

KEY TOPICS

- Management and leadership skills;
- Leadership styles in management;
- Motivational techniques to management;
- Interpersonal communication skills;
- Work performance;
- Skills in building high performance teams; and
- Group dynamics & team problem solving.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Essential management and leadership skills;
- Different leadership styles in management;
- Motivational techniques in management;
- Interpersonal communication skills;
- Coaching ability to improve work performance;
- Skills in building high performance; and
- Learn group dynamics & team problem solving.

TARGET PARTICIPANTS

The course targets new Managers, Senior Managers, and NGO's.

2.0 HUMAN RESOURCE MANAGEMENT



- 2.1 LEADERSHIP AND SUPERVISORY SKILLS DEVELOPMENT
- 2.2 SUCCESSION PLANNING
- 2.3 SUPERVISORY SKILLS FOR ADMINISTRATIVE AND OPERATIONS STAFF
- 2.4 ESSENTIAL OFFICE MANAGEMENT SKILLS FOR PERSONAL ASSISTANTS AND EXECUTIVE SECRETARIES
- 2.5 CONFLICT PREVENTION, MANAGEMENT AND RESOLUTION
- 2.6 EFFECTIVE REPORT WRITING AND PRESENTATION SKILLS

2.1 LEADERSHIP AND SUPERVISORY SKILLS DEVELOPMENT

COURSE OBJECTIVES

Leadership skills are very critical for every supervisor. This course is tailored to enable supervisors to be in a position to define who they are, articulate their roles and deliver on those roles appropriately by ably designing a leadership agenda that facilitates their supervisory role.

KEY TOPICS

- “Think differently” in the overall growth and improvement of the organization;
- Leadership style;
- Concept of supervision, roles and responsibilities;
- Leadership skills for various situations; and
- Communication skills with all levels of staff cross-functional effectiveness.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Resolve conflicts, manage change, and build winning teams that can ably articulate the reason for their existence and place their roles in the context of wider organization; and
- Comprehend and adopt appropriate leadership skills for various situations.

TARGET PARTICIPANTS

The course targets Supervisors, Team Leaders and Staff Supervisors or Line Managers.

2.2 SUCCESSION PLANNING

COURSE OBJECTIVES

Organizations need to manage risk across the business including the possibility of losing key people. Succession Planning not only allows for the identification of individuals in the business that can step into key positions but also aids the planning of targeted development of individuals.

KEY TOPICS

- Succession managing on business success;
- Decision making process to determine potential successors;
- Tools and techniques for effective succession planning; and
- Succession planning process.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Knowledge on Succession planning and its place in organizations.
- Tools and techniques to effectively implement a succession planning process; and
- Knowledge on Succession Planning and the fit with talent management programmes;

TARGET PARTICIPANTS

This course will benefit HR Professionals or Managers who are responsible for designing and Implementing succession plans.

2.3 SUPERVISORY SKILLS FOR ADMINISTRATIVE AND OPERATIONS STAFF

COURSE OBJECTIVES

This course is highly participative and provides participants with guidance on how to build and develop key skills needed in the supervisory role. The course is designed to be as practical as possible. The course is flexible to accommodate participants with differing skill levels.

KEY TOPICS

- Basic concepts of Human Resource Management;
- Supervisory functions and the role they play;
- Training and mentoring;
- Strategies and techniques of improving performance in organizations; and
- Personal, interpersonal and teamwork skills.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Introduce participants to the basic concepts of human resource management;
- Enable participants to understand the supervisory functions and the role they play in an organization;
- Equip participants with a deeper understanding of the best practices in supervision management including training and mentoring;
- Expose participants to strategies and techniques of improving performance in organizations; and
- Provide personal, interpersonal and teamwork skills to the participants.

TARGET PARTICIPANTS

Administrative Managers, Operations Managers, Company Executive Secretaries.

2.4 ESSENTIAL OFFICE MANAGEMENT SKILLS FOR PERSONAL ASSISTANTS AND EXECUTIVE SECRETARIES

COURSE OBJECTIVES

The course is designed to help administrative professionals develop the essential skills required to be effective in a busy office environment. It will equip participants with techniques and strategies for effective planning, organizing and confident communication.

KEY TOPICS

- Principles of management;
- Art of resolving conflicts at work;
- Planning, organizing and communication;
- Minutes writing, Report writing and Writing official letters; and
- Office professionalism and Office politics.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Clearly understand the principles of management and how they apply to office management and administration;
- Know how to deal with difficult situations, difficult clients, difficult bosses and other challenging work related issues;
- Apply the art of resolving conflicts at work;
- Write impressive minutes, reports, official letters and other official documents; and
- Apply office professionalism and manage office politics.

TARGET PARTICIPANTS

Personal and Executive Assistants, Secretaries, Administrative Assistants, Office Managers, Administrative Officers and Junior Human Resource Officers.

2.5 CONFLICT PREVENTION, MANAGEMENT AND RESOLUTION

COURSE OBJECTIVES

The course will help participants to understand early warning symptoms and signs and also four basic behavioural styles and know-how to adjust to each.

KEY TOPICS

- Conflicts in the workplace;
- Warning symptoms and signs;
- Conflict prevention;
- Cultural and background diversity affect interpretation of situations;
- Procedure to resolve problems that have viable solutions; and
- Techniques to maintain focus and balance in the work place.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Identify factors that create conflicts in the workplace;
- Know techniques for conflict prevention
- Appreciated how cultural and background diversity affect interpretation of situations;
- Evaluate conflicts to determine if they can be resolved;
- Implement procedure to resolve problems that have viable solutions; and
- Practice stress-reduction techniques to maintain focus and balance in the work place.

TARGET PARTICIPANTS

Human resource managers, supervisors, team leaders, heads of departments, members of disciplinary committees and all those interested in the subject of conflict resolution.

2.6 EFFECTIVE REPORT WRITING AND PRESENTATION SKILLS

COURSE OBJECTIVES

The course will help participants to understand how to structure and prepare effective presentations and ensure a positive response .

KEY TOPICS

- Barriers to communicating through a written report;
- Structure and prepare effective presentation;
- Advantages of systematic approach to report writing;
- Appropriateness of using visual aids to enhance reports;
- Personal confidence in delivering presentations to both small and large groups; and
- Effective writing style to build credibility.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Analyse the barriers to communicating through a written report;
- Recognize the advantages of systematic approach to report writing;
- Assess appropriateness of using visual aids to enhance reports;
- Research and prepare report content;
- Increase personal confidence in delivering presentations to both small and large groups;
- Develop effective writing styles to build credibility; and
- Structure reports for maximum impact and readability.

TARGET PARTICIPANTS

Administrative managers, personal and executive assistants, administrative assistants and those who would like to improve their report writing and presentation skills.

3.0 FINANCIAL MANAGEMENT & ACCOUNTING



3.1 FINANCIAL MANAGEMENT AND BUDGETARY CONTROL

3.2 FINANCE FOR NON-FINANCE MANAGERS

3.3 BUDGETING AND OPERATIONAL COST CONTROL

3.4 PUBLIC EXPENDITURE ANALYSIS AND MANAGEMENT

3.5 MANAGEMENT ACCOUNTING

3.6 ACCOUNTING FOR NON-ACCOUNTING MANAGERS

3.1 FINANCIAL MANAGEMENT AND BUDGETARY CONTROL

COURSE OBJECTIVES

The course will help participants to understand the main concepts and methodology around cost management and budgeting.

KEY TOPICS

- Concepts of accounting, budgets and finance;
- Unit cost measurements;
- Strategic cost control;
- Written budget justifications;
- Capital assets; and
- Budget formulation process.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Apply the essential concepts of accounting, budgets and finance;
- Apply the use of unit cost measurements in performance-based budgeting;
- Maintain strategic cost control;
- Appreciate the importance of reducing unnecessary costs;
- Identify appropriate outputs for an organizational unit or programme component;
- Use best practices to create written budget justifications;
- Determine and apply the costs estimated to produce those outputs and calculate cost per unit of output; and
- Locate guidance on budgeting for capital assets, and integrate performance budgeting into their organization's budget formulation process.

TARGET PARTICIPANTS

This training course is ideal for senior managers who manage budgets or managers who are currently managing projects and/or contracts. Senior managers who control cost and budgeting for their departments or organizations will also find this course extremely beneficial.

3.2 FINANCE FOR NON-FINANCE MANAGERS

COURSE OBJECTIVES

The major objective of this course is to enable the participant to understand information in balance sheets, profit & loss and cash flow statements and enable them to identify financial problems and make decisions.

KEY TOPICS

- Balance sheets, profit & loss and cash flow statements;
- Financial statements;
- Operational and financial performance evaluation skills; and
- Financial forecasting, planning and budgeting skills.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Analyze and interpret financial statements;
- Identify financial problems and make decisions;
- Equip participants with operational and financial performance evaluation skills; and
- Provide financial forecasting, planning and budgeting skills.

TARGET PARTICIPANTS

Human Resource Managers/officers, Procurement Managers, Administrators, Marketing Officers, policy Makers and all those managers who need to learn, understand and apply basic financial management techniques within their organisations.

3.3 BUDGETING AND OPERATIONAL COST CONTROL

COURSE OBJECTIVES

The major objective of this course is to enable the participant to understand budgeting and costing terminology and be in a position to devise their own budget and control system.

KEY TOPICS

- Budgeting process;
- Budgeting and costing terminology;
- Budget and control system; and
- Balance Scorecards.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Be in a position to devise their own budget and control system; and
- Be aware of non-budget tools such as Balance Scorecards.

TARGET PARTICIPANTS

Managers, Executives and Company Directors, Business People without accounting/finance skills or knowledge but keen on translating their strategies into financials and all personnel involved in preparation of budgets or supervising others.

3.4 PUBLIC EXPENDITURE ANALYSIS AND MANAGEMENT

COURSE OBJECTIVES

The major objective of this course is to enable the participant to be exposed to the issues that are pertinent to national expenditure and explore efficiency and equity aspects as well as cost effectiveness of public expenditure.

KEY TOPICS

- Public expenditure;
- Obstacles to effective public expenditure management;
- Tools used to analyze public expenditure; and
- Cost effectiveness of public expenditure.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Understand the full range of issues associated with public expenditure;
- Examine various obstacles to effective public expenditure management;
- Provide a full range of tools that are used to analyze public expenditure;
- Realise issues that are pertinent to national expenditure; and
- Explore efficiency and equity aspects as well as cost effectiveness of public expenditure.

TARGET PARTICIPANTS

Economists, budget officers, debt officers, policy analysts, finance officers, heads of departments, monitoring and evaluation specialists and all those responsible for ensuring the achievements of aggregate fiscal discipline in public service

3.5 MANAGEMENT ACCOUNTING

COURSE OBJECTIVES

The major objective of this course is to enable the participant to compare budgets with actual results, analyse and interpret variances and also use relevant information for making short and long term decisions.

KEY TOPICS

- Cost Management Concepts;
- Costing Techniques,
- Planning and Control Systems;
- Master Budget and a Flexible Budget; and
- Management Accounting Codes of ethics.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Explain cost management concepts;
- Apply product costing techniques, planning and control systems;
- Use relevant information for making short and long term decisions;
- Prepare a master budget and a flexible budget;
- Compare budgets with actual results, analyze and interpret variances; and
- Apply management accounting codes of ethics to resolve an ethical situation.

TARGET PARTICIPANTS

Accountants, financial officers, internal auditors, fund managers, financial economic planners, budgeting officers, financial analysis's and other professionals who make financial decisions in public and private sectors.

3.6 ACCOUNTING FOR NON-ACCOUNTING MANAGERS

COURSE OBJECTIVES

The objective of this course is to introduce participants to the nine (9) steps of accounting circle and how to properly place debits and credits in “T” accounts.

KEY TOPICS

- Nine (9) steps of accounting circle;
- Debits and Credits in “T” Accounts;
- General Journal and General Ledger;
- Trial balance; and
- Financial Statements.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Participate in the nine (9) steps of accounting circle;
- Properly place debits and credits in “T” accounts;
- Post transactions on a general journal and general ledger;
- Prepare a trial balance; and
- Prepare common financial statements.

TARGET PARTICIPANTS

Senior Executives, Company Directors, Mayors, Councilors, Policy Makers, Auditors, Procurement Officers, Treasurers and other professionals without accounting knowledge or skills who need to make informed use of corporate financial statements and managerial accounting reports or information.

4.0 PROJECT MANAGEMENT



4.1 MONITORING AND EVALUATION OF DEVELOPMENT PROJECTS/
PROGRAMMES

4.2 PROGRAM/PROJECT PLANNING, MONITORING AND EVALUATION

4.3 EFFECTIVE PROJECT MANAGEMENT

4.4 MONITORING AND EVALUATION OF GOVERNMENT PROJECTS

4.5 GRANT PROPOSAL WRITING SKILLS

4.1 MONITORING AND EVALUATION OF DEVELOPMENT PROJECTS/ PROGRAMMES

COURSE OBJECTIVES

The major objective of this course is to enable participants to learn how to design a logical, systematic, multi- layered monitoring system and how to apply it in their organisations.

KEY TOPICS

- Develop “smart” objectives and indicators;
- Risk factors and assumptions;
- Monitoring and evaluation plan;
- Evaluation report and terms of reference;
- Logical framework approach; and
- Plan of action.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Produce a stakeholder analysis, problem analysis and objective analysis;
- Identify outputs, activities and inputs;
- Identify and develop “smart” objectives and indicators;
- Identify and develop risk factors and assumptions;
- Develop a plan of action;
- Develop monitoring and evaluation plan for their projects; and
- Produce an evaluation report and terms of reference.

TARGET PARTICIPANTS

This is ideal for program/ project officers and Managers and staff who are actively involved in M&E within their organization.

4.2 PROGRAM/PROJECT PLANNING, MONITORING AND EVALUATION

COURSE OBJECTIVES

The objectives of the course are to create an understanding of the meaning and importance of monitoring and evaluation at policy, programme, strategic plan and project levels and to enable participants to effectively utilize monitoring and evaluation results.

KEY TOPICS

- Meaning and importance of monitoring and evaluation at policy, programme, strategic plan and project levels;
- Different kinds of project/programme monitoring and evaluation processes and procedures; and
- Plan, prepare and implement Monitoring and Evaluation schemes and execute them.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Create an understanding of the meaning and importance of monitoring and evaluation at policy, programme, strategic plan and project levels;
- Undertake effectively and efficiently the different kinds of project/programme monitoring and evaluation processes and procedures;
- Plan, prepare and implement Monitoring and Evaluation schemes and execute them;
- Manage effectively Monitoring and Evaluation and Impact Assessment activities;
- Prepare Monitoring and Evaluation reports; and
- Effectively utilize monitoring and evaluation results.

TARGET PARTICIPANTS

Senior and middle level officials in NGOs, training institutions, Government agencies, Government departments, Consulting firms, who are (or are expected to be) responsible for management/evaluation of projects or training in this area.

4.3 EFFECTIVE PROJECT MANAGEMENT

COURSE OBJECTIVES

The objectives of the course are to participants effectively plan and schedule projects; Plan and execute Budgets for development projects and develop an M & E plan for programmes.

KEY TOPICS

- Overview of Project Management;
- Key success factors in project management;
- Organizational concepts for projects;
- Plan and schedule projects;
- Plan and execute Budgets for development projects; and
- Report project progress.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Get an overview of project management;
- Identify key success factors in project management;
- Grasp organizational concepts for projects;
- Select and evaluate development projects;
- Effectively plan and schedule projects;
- Plan and execute Budgets for development projects;
- Develop an M & E action plan for programmes; and
- Effectively report project progress.

TARGET PARTICIPANTS

Company Executives and Senior Managers in public and private institutions, partners and senior associates in architectural and engineering firms, managers and executives who are responsible for evaluating and monitoring projects in the service sector (banks, insurance, and so on).

4.4 MONITORING AND EVALUATION OF GOVERNMENT PROJECTS

COURSE OBJECTIVES

The objective of the course is to train participants on how to build and maintain a monitoring system that provides relevant information to all stakeholders at all stages of the Project Cycle.

KEY TOPICS

- Role of Monitoring and Evaluation in Government Projects;
- M & E plan for Government Projects; and
- Project Logic Model.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Analyse the role of Monitoring and Evaluation in Government Projects;
- Develop an M& E plan for Government Projects;
- Build and maintain a monitoring system that provides relevant information to all stakeholders at all stages of the Project Cycle;
- Develop KPIs and a people centred Project Logic Model; and
- Effectively produce M & E report.

TARGET PARTICIPANTS

This course is ideal for Policy makers, Project Managers and executives who are responsible for evaluating and monitoring projects in the government.

4.5 GRANT PROPOSAL WRITING SKILLS

COURSE OBJECTIVES

This course is designed to equip participants with skills in research and project proposal write-up, as well as resource mobilization for the development of their respective institutions or organizations.

KEY TOPICS

- Key practices for developing effective programs and successful proposals;
- Types of information for every proposal;
- Four elements of a proposal;
- Doable evaluation plan;
- Bullet-proof budget;
- Grant proposal review process; and
- Work relationships with funders.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Identify the key practices for developing effective programs and successful proposals;
- Understand the types of information that are a “must” for every proposal;
- Recognize the four most crucial elements of a proposal and how they fit together;
- Spell out the specific, measurable outcomes to be achieved in a program/ project;
- Build a basic, doable evaluation plan;
- Create a bullet-proof budget;
- Plan ways to make programs sustainable;
- Understand the grant proposal review process; and
- Create and maintain work relationships with funders.

TARGET PARTICIPANTS

Academicians in higher learning institutions, officials in the central and local governments, officers in private consulting firms or any other individual willing to enhance proposal writing skills.

5.0 LAW



- 5.1 DEMOCRACY, RULE OF LAW AND HUMAN RIGHTS
- 5.2 INTELLECTUAL PROPERTY RIGHTS IN BUSINESS
- 5.3 GENDER-SENSITIVE GOVERNANCE
- 5.4 GENDER BASED VIOLENCE AND THE LAW
- 5.5 WILL DRAFTING AND ESTATE PLANNING

5.1 DEMOCRACY, RULE OF LAW AND HUMAN RIGHTS

COURSE OBJECTIVES

Overall objective of the course is to enable participants to design and implement policies and legal frameworks that foster democracy, advance rule of law and promote human rights.

KEY TOPICS

- Democracy, rule of Law and Human Rights;
- Policies and legal frameworks that foster democracy;
- Three concepts that foster greater accountability in governance; and
- Policies that foster democracy, advance rule of law and promote human rights.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- The institutional arrangements relating to democracy, rule of law and human rights;
- Policies and legal frameworks that foster democracy, advance rule of law and promote human rights
- How the three concepts foster greater accountability in governance at all levels; and
- How to design and implement policies that foster democracy, advance rule of law and promote human rights.

TARGET PARTICIPANTS

This course is designed for policy makers, decision makers, politicians, NGOs dealing with Human Rights, Rule of law and Democracy, Law Enforcement officers and personnel as well as all others who have an interest in Democracy, Rule of Law and Human Rights.

5.2 INTELLECTUAL PROPERTY RIGHTS IN BUSINESS

COURSE OBJECTIVES

This course is designed for persons wishing to have a general understanding of Intellectual Property (IP) as well as to persons eager to enhance their professional knowledge of IP through a better understanding of the international IP landscape.

KEY TOPICS

- Venture capital - IP assets;
- Franchising;
- Valuable competitive intelligence;
- Product differentiation;
- Competitive markets
- New markets; and
- Commercial value.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Prevent others from copying their products or using their innovations. This is particularly relevant in today's competitive markets;
- Create a strong brand identity through product differentiation drawing on the strategic use of one or more types of IPRs;
- Obtain valuable competitive intelligence (analyzing commercial and technological information from patent, trademark and design databases can increase a company's understanding of technological fields and trends, identify future research and growth areas, and analyze competitors, thereby saving research/development/marketing time and resources);
- Gain revenues through licensing, franchising or other IP transactions;
- Obtain financing or venture capital - IP assets that have legal protection and can be valued and leveraged to obtain capital; and
- Increase their commercial value and Access new markets.

TARGET PARTICIPANTS

The course is aimed at Chief Executive Officers (CEOs), Business Managers, Marketing Managers, Human Resource Managers, Research Managers and sole Businessmen, who need to learn how to protect, manage and enforce intellectual property rights.

5.3 GENDER-SENSITIVE GOVERNANCE

COURSE OBJECTIVES

Understand what gender-sensitive governance could and should look like, and understand the practical actions to progress towards these goals. Understand how change can happen in government institutions themselves so they respond better to the needs of women, challenge gender inequality and promote women's rights.

KEY TOPICS

- Context of gender and governance in Tanzania;
- Promoting gender equality by civil society and citizen;
- What is gender-sensitivity and the practical actions to progress towards these goals; and
- Real-world challenges to change that are commonly faced.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Appreciate the differing understanding of governance and how the concept has evolved over time and the context of gender and governance in Tanzania;
- Understand why governance needs to be gender-sensitive despite the barriers and challenges to this goal;
- Be able to analyse governance institutions, particularly government institutions, from a gender perspective to expose gender-blind policy and discriminatory practices;
- Be aware of the mechanisms that need to be in place to ensure government institutions are held to account for their record on promoting gender equality by civil society and citizen; and
- Know about the real-world challenges to change that are commonly faced, be inspired by other stories of practical action, and be aware of useful guides and toolkits.

TARGET PARTICIPANTS

The course has been designed for a broad range of people, including: gender focal points within ministries, departments and agencies (MDAs), gender leads in Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs), Heads of Units and Departments in various institutions and media personnel among others. However anyone interested in understanding the challenges relating to gender and governance, such as non-gender specialist policy advisors, academics and students would also benefit.

5.4 GENDER BASED VIOLENCE AND THE LAW

COURSE OBJECTIVES

It is expected that, at the end of the course the participants will be able to:

- Understand the various laws and policies related to gender based violence Understand international and regional perspectives on sexual and gender based violence;
- Understand the effects at sexual and gender based violence in the community and workplace; and
- Understand the legal processes involved in dealing with sexual and gender based violence.

KEY TOPICS

- Recognize and identify all acts and omissions that constitute sexual and gender based violence;
- Various laws and policies related to gender based violence;
- International and regional perspectives on sexual and gender based violence;
- Effects of sexual and gender based violence in the community and workplace;
- Manage sexual and gender based violence reports in the community and work place; and
- Legal processes involved in dealing with sexual and gender based violence.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Recognize and identify all acts and omissions that constitute sexual and gender based violence.
- Identify the various laws and policies related to gender based violence;
- Know the international and regional perspectives on sexual and gender based violence;
- Describe the effects of sexual and gender based violence in the community and workplace;
- Effectively manage sexual and gender based violence reports in the community and work place; and
- Practice the legal processes involved in dealing with sexual and gender based violence.

TARGET PARTICIPANTS

This course is designed for everyone who works in a multi-gendered environment, human resources officers, administrative officer, top and middle level managers in both public and private institutions.

5.5 WILL DRAFTING AND ESTATE PLANNING

COURSE OBJECTIVES

At the end of the course participants will be able to understand various types of wills and the legal regime governing them.

KEY TOPICS

- Types of wills and the legal regime governing them;
- Importance of drafting wills;
- Things to consider when drafting wills/instructing a person to draft a will;
- What is estate planning;
- Why plan your estate;
- The basics of how to plan your estate; and
- The vehicle for state planning.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Identify various types of wills and the legal regime governing them;
- Explain the Importance of drafting wills;
- Consider when drafting wills/instructing a person to draft a will;
- Know the meaning of estate planning;
- Know the importance of plan your estate;
- Know basics of how to plan your estate; and
- Know the vehicle for estate planning.

TARGET PARTICIPANTS

This course is designed for everyone who needs to know the basics of will writing and estates planning. It is suitable and recommend for all UDSM staff and members of the general public.

6.0 EDUCATION



6.1 EDUCATION MANAGEMENT

6.1.1 MANAGEMENT OF HIGHER EDUCATION INSTITUTIONS

6.1.2 USING NVIVO IN HANDLING QUALITATIVE AND QUANTITATIVE DATA

6.2 EDUCATIONAL PSYCHOLOGY

6.2.1 INCLUSIVE EDUCATION

6.2.2 ASSESSMENT AND EVALUATION IN COMPETENCE BASED EDUCATION

6.1 EDUCATION MANAGEMENT

6.1.1 MANAGEMENT OF HIGHER EDUCATION INSTITUTIONS

COURSE OBJECTIVES

To provide theoretical and practical foundation in management & administration of higher education institutions and related issues, e.g. governance of higher education institutions in an African context.

KEY TOPICS

- Management, Administration, Leadership, Governance theories and practice in the context of higher education;
- Comparative higher education systems and policies;
- Innovative approaches to financing higher education institutions;
- Human Resource and Personnel Management in higher education institutions; and
- Quality Assurance and Control in higher education institutions.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Practice management, administration, leadership and governance theories in higher education institutions;
- Demonstrate an understanding of different world higher education systems & policies and their implications on management and administration of higher education institutions;
- Apply innovative approaches in securing financial and other resources for a respective higher education institution;
- Develop human resource and personnel management systems for higher education institutions; and
- Appreciate issues of quality in higher education systems.

TARGET PARTICIPANTS

Middle and senior level administrators, department heads, deans and directors in public and private universities and other non-university institutions.

6.1.2 USING NVIVO IN HANDLING QUALITATIVE AND QUANTITATIVE DATA

COURSE OBJECTIVES

At the end of the module, a participant should be able to explain the nature, basic functions and limitations of NVivo software.

KEY TOPICS

- Create, backup and copy an NVivo project;
- Bring materials into NVivo; and
- Code text based sources in NVivo.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Explain the nature, basic functions and limitations of NVivo software;
- Create, backed up and copy an NVivo project;
- Bring materials into NVivo; and
- Coded text based sources in NVivo.

TARGET PARTICIPANTS

University Lecturers, Postgraduate Students and Researchers.

6.2 EDUCATIONAL PSYCHOLOGY

6.2.1 INCLUSIVE EDUCATION

COURSE OBJECTIVES

To empower in-service teachers so that they can handle students with special educational needs in inclusive settings. Explain and analyse the concept and development of inclusive education globally and in Tanzania.

KEY TOPICS

Medical and social models of disability

Understanding the concepts of:

- Special Needs Education,
- Integration Mainstreaming;
- Special Needs Education;
- Special Schools;
- Integration;
- Mainstreaming; and
- Inclusive education

How to include Exceptional learners in inclusive classrooms -i.e. those with: -

- Learning disability;
- Mental exceptionalities;
- Mental retardation;
- Gifted and talented;
- Communication disorders;
- Autism;
- Behavioural disorders;
- Sensory Impairments;
- Hearing and Visual impairments;
- Physical (motor) and health impairment;
- Gifted and talented;
- Other special needs i.e. minority groups, students Health; and
- Gender

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Understand the causes of special needs children;
- Detect, identify, assess and provide interventions for special needs children;
- Practice knowledge and skills on how to accommodate needs of special needs children in inclusive classes;
- Identify categories of special needs children in Tanzania;
- Explain educational needs of special needs children; and
- Impart special educational needs teaching strategies to teachers.

TARGET PARTICIPANTS

Primary and Secondary school teachers, Higher education institutions lecturers/instructors.

6.2.2 ASSESSMENT AND EVALUATION IN COMPETENCE BASED EDUCATION

COURSE OBJECTIVES

This course intends to equip participants with basic knowledge and skills which are important for developing/constructing valid and reliable tools for measurement, assessment and monitoring of students' learning and educational attainments. The course covers, among others, principles of test construction, assembling, administration and analysis of classroom test results.

KEY TOPICS

- Basic concepts in assessment and evaluation;
- Conceptual issues in modern education;
- Designing assessment work, tests and examination within CBE framework;
- Compilation, analysis assessment, tests and examination results within CBE framework; and
- Interpretation and dissemination of assessment, tests and examination results within CBE framework.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Define basic concepts in assessment and evaluation;
- Understand the basic concepts in assessment and evaluation; and
- Practice knowledge and skills on how to construct, administer, mark, analyse and use test results to improve teaching and learning within CBE framework.

TARGET PARTICIPANTS

School teachers, college and University Academics.

7.0 TEACHING METHODOLOGY (PEDAGOGY)



7.1 ADVANCED TEACHING METHODOLOGY FOR INSTRUCTORS IN HIGHER EDUCATION INSTITUTION

7.1 ADVANCED TEACHING METHODOLOGY FOR INSTRUCTORS IN HIGHER EDUCATION INSTITUTIONS

COURSE OBJECTIVES

Provide the participants with an understanding of the concepts on teaching and learning with emphasis on the teaching and learning of adults as well as teaching a large class.

KEY TOPICS

- Teaching in Higher Education;
- Strategies and Methods;
- Multiple learning styles of Higher Education students;
- Teaching and Learning of Adult Learner;
- Evaluating students writing;
- Assessment in Higher Education; and
- Entrepreneurship in Teaching and Learning.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Understand teaching in Higher Education;
- Identify Strategies and Methods and multiple learning styles of Higher Education students;
- Teaching and Learning of Adult Learner;
- Evaluate students writing;
- Assessment in Higher Education; and
- Apply Entrepreneurship in Teaching and Learning.

TARGET PARTICIPANTS

This course is ideal for Policy makers, Project Managers and executives who are responsible for evaluating and monitoring projects in the government.

8.0 STATISTICS



- 8.1 STATISTICAL ANALYSIS WITH SPSS
- 8.2 STATISTICAL ANALYSIS WITH STATA
- 8.3 STATISTICAL ANALYSIS WITH R

8.1 STATISTICAL ANALYSIS WITH SPSS

COURSE OBJECTIVES

To introduce participants to the basics of data management, Descriptive and Inferential Statistical Analysis with SPSS.

KEY TOPICS

- Continuous versus Categorical Data (Nominal, Ordinal, Scale, Ratio);
- Nature of data as the guidance in selecting statistical models;
- Data processing;
- Data Template;
- Data entry;
- Variable transformation;
- Data Visualization and Data Exploration;
- Checking missing observations;
- Identifying human errors in data;
- Checking Assumptions of Statistical models;
- Descriptive Analysis and Inferential Statistics;
- Frequency Tables (one way and two way);
- Basic Graphics (Histogram, Pie-chart and clustered bar graphs etc.);
- Analysis of Variance (ANOVA);
- Ordinary Regression Analysis (Simple and Multiple);
- Logistic Regression Analysis (Binary, Ordered and Multinomial); and
- Survival Analysis.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Select statistical models for the appropriate data;
- Understand the basics of statistical Analysis using SPSS;
- Manage data and manipulate (handling missing observations and correcting human errors resulting from data entry); and
- Apply basic descriptive and inferential statistical analysis in wide range of areas.

TARGET PARTICIPANTS

Academia, Researchers, NGOs, Students, etc.

8.2 STATISTICAL ANALYSIS WITH STATA

COURSE OBJECTIVES

To introduce participants to the basics of data management, descriptive and inferential Statistical analysis with STATA.

KEY TOPICS

❖ Understanding Nature of Data;

- Continuous versus Categorical Data (Nominal, Ordinal, Scale, Ratio); and
- Nature of data as the guidance in selecting statistical models.

❖ Data Processing

- Data Template;
- Data entry; and
- Variable transformation.

❖ Data Visualization and Data Exploration

- Checking missing observations;
- Identifying human errors in data; and
- Checking Assumptions of Statistical models.

❖ Descriptive Analysis and Inferential Statistics

- Frequency Tables (one way and two way);
- Basic Graphics (Histogram, Pie-chart and clustered bar graphs etc.);
- Analysis of Variance (A NOVA);
- Ordinary Regression Analysis (Simple and Multiple);
- Logistic Regression Analysis (Binary, Ordered and Multinomial); and
- Survival Analysis.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Select statistical models for the appropriate data;
- Understand the basics of statistical Analysis using STATA;
- Manage data and manipulate (handling missing observations and correcting human errors resulting from data entry); and
- Apply basic descriptive and inferential statistical analysis in wide range of areas.

TARGET PARTICIPANTS

Academia, Researchers, NGOs, Students, etc.

8.3 STATISTICAL ANALYSIS WITH R

COURSE OBJECTIVES

To introduce participants to Statistical Analysis using R

KEY TOPICS

- Introduction to R Studio and Tinn-R;
- Installing packages in R and Loading packages into workplace;
- Graphics in R;
- Descriptive and Inferential Statistic; and
- Survival Analysis.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Familiarize with RStudio and Tinn-R; and
- Carry out Descriptive and Inferential Statistical Analysis, tabulations and graphical presentations using R.

TARGET PARTICIPANTS

Academia, Researchers, NGOs, Students, etc.

9.0 CHEMISTRY



9.1 MODERN LABORATORY MANAGEMENT PRACTICE

9.1 MODERN LABORATORY MANAGEMENT PRACTICE

COURSE OBJECTIVES

To develop capacity and enhance professional skills of participants in the management of their laboratories and working environment.

KEY TOPICS

- A modern Laboratory;
- Health and Safety in the Laboratory;
- Leadership and Managerial Skills;
- Achieving Quality in the Laboratory;
- Good Laboratory Practice (GLP);
- Chemical Hazards/Accident Investigation;
- Risk Assessment;
- First Aid and Emergency Response;
- Hazardous Material Control;
- Maintenance and Repairs;
- Workman's Compensation for Injuries and Occupational Diseases;
- Laboratory Waste Management;
- Monitoring, Inspection and Evaluation;
- Budget, Purchases and Financial Management;
- Errors and Uncertainty; and
- Method and Data Validation; and
- PPE.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Enhance their knowledge on leadership and other skills useful to the management of laboratories and working environment;
- Manage laboratories and chemical handling;
- Improve their capacity to design and handle experiments in laboratories; and
- Minimize chemical accidents in the laboratories.

TARGET PARTICIPANTS

Persons Managing Laboratories, Chemicals and/or Working in Chemical Quality Control & Teachers from Secondary Schools with New Laboratories.

10.0 ZOOLOGY & WILDLIFE CONSERVATIONS



10.1 LIVING WITH SNAKES: HOW TO AVOID AND SURVIVE SNAKEBITES

10.0 ZOOLOGY AND WILDLIFE CONSERVATIONS

10.1 LIVING WITH SNAKES: HOW TO AVOID AND SURVIVE SNAKEBITES

COURSE OBJECTIVES

To create awareness to the public on snake bites and improve snake conservation. Specifically the course aims at saving many people from the hazards of snakebites by training them about the biology of snakes and how people and snakes can coexist.

KEY TOPICS

- General snake distribution in Tanzania.
- General information on venomous and non-venomous snakes;
- Snakes and human beings;
- Venom apparatus, clinical features or symptoms of envenoming;
- Epidemiological data in Africa;
- Avoiding snake bites; and
- First aid and treatment of snake bites, snake trapping conservation and handling of snakes.

LEARNING OUTCOME

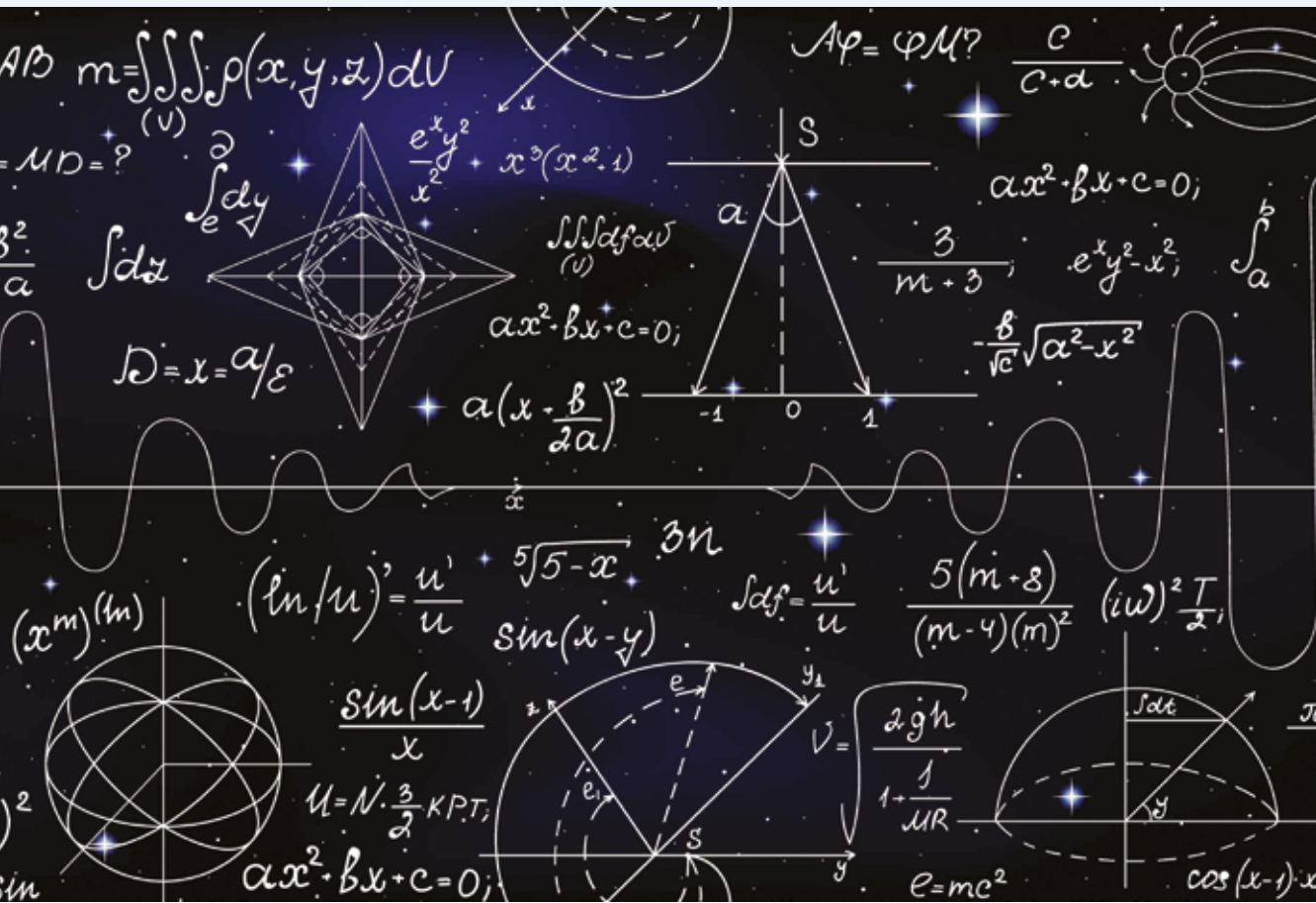
By the end of the course participants are expected to have gained the following:-

- Venomous versus non venomous snakes,
- Snake handling and basic issues associated with snake bites; and
- An overview on first aid to victims of snakebites, and identification of the dangerous snakes in the East Africa Region.

TARGET PARTICIPANTS

People prone to snake bites especially those working in plantations and mining sites, people who spend considerable amount of time in the wilderness (field), tour guides, tourists, health practitioners, security companies, wildlife scientists, game rangers and park wardens, hunters and gatherers, snake trappers and collectors, refugees (living in camps), diplomats and their families, gardeners, students and general public.

11.0 PHYSICS



11.1 NUCLEAR SECURITY

11.2 SOLAR PV SYSTEMS

11.3 SOLAR PV TECHNOLOGY FOR TECHNICIANS AND ARTISANS

11.4 LAB EQUIPMENT AND CONSUMABLES

11.5 PV ACCESSORIES AND CONSUMABLES

11.6 PHYSICS EXPERIMENTS FOR SECONDARY SCHOOLS

11.1 NUCLEAR SECURITY

COURSE OBJECTIVES

To prepare the front line officers for joining the certificate in nuclear security.

KEY TOPICS

- Introduction to ionizing radiation;
- Public views about radiation;
- Radiation sources; and
- Biological effects of ionizing radiation, detection, Radiation Protection, Nuclear threat and terrorism nuclear security measures practical session.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Awareness on matters concerning nuclear security; and
- How to use radiation measuring devices.

TARGET PARTICIPANTS

Front line officers from Police, State Security, and border guard security, custom officers, fire brigade, airport authorities etc.

11.2 SOLAR PV SYSTEMS

COURSE OBJECTIVES

To impart necessary knowledge and skills for proper design, installation and maintenance of solar PV systems.

KEY TOPICS

- Operation principles of PV system components;
- Design and sizing of PV system;
- Installation of PV systems;
- Maintenance and custom service; and
- Applications, advantages and benefits.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Demonstrate knowledge and skills on PV system devices; and
- Perform proper solar PV design and installation.

TARGET PARTICIPANTS

Users and Electricians.

11.3 SOLAR PV TECHNOLOGY FOR TECHNICIANS AND ARTISANS

COURSE OBJECTIVES

To train local technicians and or artisans responsible for installation of PV systems for quality installation, services and-maintenance.

KEY TOPICS

- PV Overview;
- Solar Panels;
- Storage Batteries;
- Power Conditioning;
- Appliance Planning and Maintenance;
- Solar PV installation; and
- System Commissioning and Maintenance.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- To equip Technicians and Artisans with PV technology Knowledge and skills; and
- Improved PV systems Performances.

TARGET GROUP

Local PV.

11.4 PV ACCESSORIES AND CONSUMABLES

COURSE OBJECTIVES

To train local technicians and or artisans responsible for installation of PV systems for quality installation, services and maintenance.

KEY TOPICS

- PV Overview;
- Solar Panels;
- Storage Batteries;
- Power Conditioning;
- Appliance Planning and Maintenance;
- Solar PV installation; and
- System Commissioning and Maintenance.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- To equip Technicians and Artisans with PV technology Knowledge and skills; and
- Improved PV systems Performances.

TARGET GROUP

Local PV.

11.5 PHYSICS EXPERIMENTS FOR SECONDARY SCHOOLS

COURSE OBJECTIVES

To train Secondary School physics teachers who are responsible for teaching and supervising physics practicals in Secondary Schools.

KEY TOPICS

- Overview of Physics Experiments;
- Design Physics Experiments;
- Handling and Operating Laboratory Equipment Data;
- Analyzing Experimental Data;
- Analysis; and
- Supervising Physics Experiments.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Secondary School Teachers will be equipped with knowledge and skills of designing and performing Secondary School Physics Practical; and
- Secondary school students will have a chance to understand Physics Practical and be well prepared for their University studies.

TARGET GROUP

Secondary school teachers in Tanzania.

12.0 ART AND DESIGN



12.1 DRAWING

12.2 PAINTING

12.3 SCULPTURE

12.4 TEXTILE DESIGN

12.5 GRAPHIC DESIGN

12.6 FASHION DESIGN

12.1 DRAWING

COURSE OBJECTIVES

The course introduces individuals to the visual elements and practical applications in drawing.

KEY TOPICS

- Identify types of lines;
- Compare and contrast types of shading;
- Demonstrate the creation of three-dimensional space on a flat surface

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Apply proper techniques in drawing.

TARGET PARTICIPANTS

Teachers, artists and art lovers.

12.2 PAINTING

COURSE OBJECTIVES

The course introduces individuals to apply proper techniques in painting.

KEY TOPICS

- Colour relationships in a colour wheel;
- Four colour harmonies (monochromatic, complementary, analogous and triad) in compositions; and
- Colour composition.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Apply proper painting techniques;
- Create and identify colour relationships in a colour wheel;
- Demonstrate mastery in the application of four colour harmonies (monochromatic, complementary, analogous and triad) in compositions; and
- Create atmospheric perspective in a colour composition.

TARGET PARTICIPANTS

Teachers, painters, artists and any person interested with painting.

12.3 SCULPTURE

COURSE OBJECTIVES

This course introduces individuals to skills and techniques of creating sculpture.

KEY TOPICS

- Creating sculpture in different methods;
- Rendering drawings for sculpture; and
- Techniques, materials and processes of creating sculpture.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Apply skills and techniques to create a quality sculpture using different materials;
- Create sculptures in different methods such as modeling, casting, carving and assembling;
- Render drawings for sculpture; and
- Understand techniques, materials and processes of creating sculpture.

TARGET PARTICIPANTS

Teachers, artists and any person interested with sculpting.

12.4 TEXTILE DESIGN

COURSE OBJECTIVES

The course introduces individuals to apply proper skills and techniques in textile design.

KEY TOPICS

- Making of a khanga design;
- Designs using natural media (potato, banana leaf, etc.); and
- Batik technique in making textile designs.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Demonstrate the making of a khanga design;
- Create designs using natural media (potato, banana leaf, etc.); and
- Apply the Batik technique in making textile designs.

TARGET PARTICIPANTS

Teachers, Artistic directors, arts managers and fashion designers.

12.5 GRAPHIC DESIGN

COURSE OBJECTIVES

The course introduces individuals to the ability to use computer tools in designing art work.

KEY TOPICS

- Introduction to Computer essentials; and
- Introduction to Elements of Design.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Design art (eg company images, Advertisements, certificates etc) using computer tools.

TARGET PARTICIPANTS

Teachers, Artistic directors, arts managers and art lovers.

12.6 FASHION DESIGN

COURSE OBJECTIVES

The course introduces individuals to the ability to create fashionable dresses.

KEY TOPICS

- Introduction to Fashion Design; and
- Introduction to apply professional skills in producing fashionable clothes.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Design a fashionable cloth.

TARGET PARTICIPANTS

Teachers, fashion designers, fashionistas and Tailoring artists.

13.0 FILM



13.1 FUNDAMENTALS OF CINEMATOGRAPHY

13.2 FUNDAMENTALS OF FILM EDITING

13.3 FUNDAMENTALS OF FILM DIRECTING

13.4 FUNDAMENTALS OF SCREENWRITING

13.5 FUNDAMENTALS OF FILM FINANCING

13.1 FUNDAMENTALS OF CINEMATOGRAPHY

COURSE OBJECTIVES

The aim of the course is to practically introduce students to the basic techniques of cinematography.

KEY TOPICS

- Camera Composition;
- Shot Sizes;
- Shot Types;
- Screen Continuity;
- Screen Angles;
- Screen/ Camera Movement; and
- Cameras- The Basic Elements.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Apply acquired skills in camera techniques and operations.

TARGET PARTICIPANTS

Film makers, cinematographers or any individual interested in film making.

13.2 FUNDAMENTALS OF FILM EDITING

COURSE OBJECTIVES

The aim of the course is to introduce participants to the fundamentals of film editing.

KEY TOPICS

- Editing terms;
- Types of editing style;
- Basic editing tools and techniques;
- Capturing;
- Importing and exporting;
- Setting up and organizing your project;
- Starting your project;
- Organizing for editing; and
- Finishing and Mastering.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Apply the acquired editing skills and edit a 5 minutes film.

TARGET PARTICIPANTS

Film editors, any individual who is interested in Film editing.

13.3 FUNDAMENTALS OF FILM DIRECTING

COURSE OBJECTIVES

The Objective of the course is to introduce the participants to the basic principles and techniques behind film directing.

KEY TOPICS

- The Director- who is he/she?;
- The director's roles;
- Film Language and Directing Methodology;
- Production: Principal photography; and
- Post Production: Working with an editor.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Apply the acquired editing skills in directing a 5 minutes film; and
- Demonstrate how to breakdown the script, work with actor and the production crew.

TARGET PARTICIPANTS

Film directors and any individual who aspires to be a Film Director.

13.4 FUNDAMENTALS OF SCREENWRITING

COURSE OBJECTIVES

The aim of the course is to introduce the participants to the basic principles and techniques of screen writing.

KEY TOPICS

- The writer and the story;
- Developing a good story;
- Setting up the story;
- The principles of screen play;
- What must be considered in writing a screenplay?;
- Building and writing the screenplay;
- Screenplay format; and
- Project: Writing a 5 minutes screenplay.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Apply the acquired skills in creating and developing a three scenes screenplay.

TARGET PARTICIPANTS

Screens play writers, any individual aspiring to be a screenplay writer.

13.5 FUNDAMENTALS OF FILM FINANCING

COURSE OBJECTIVES

The course aims to introduce participants to the business side of filmmaking.

KEY TOPICS

- Film financial Stakeholders;
- Main methods of film financing;
- Packaging the project for financing;
- Film budgeting; and
- Assembling the main players.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Identify individuals involved in financing a film;
- Methods of finance; and
- How to sell/buy a product/project.

TARGET PARTICIPANTS

Producers, Directors, Screenwriters.

14.0 THEATRE AND DRAMA



14.1 ACTING FOR FILM AND STAGE

14.2 FUNDAMENTALS OF STAGE DIRECTING

14.3 FUNDAMENTALS OF DANCE CHOREOGRAPHY

14.4 FUNDAMENTALS OF THEATRE (PLAY) PRODUCTION

14.5 WRITING FOR STAGE PLAYS

14.6 WRITING FOR RADIO PLAYS

14.1 ACTING FOR FILM AND STAGE

COURSE OBJECTIVES

This course aims at imparting participants with skills in acting for film and stage

KEY TOPICS

❖ Principles of Interpretation and Analysis;

- Knowing your Tools;
- Selecting the Play;
- Researching the Play;
- Analyzing the Play;
- Breaking down the Play;
- The Play and the actor; and
- Searching the character.

❖ Developing/creating/building the character:

- Bring the character to life; and
- The Actor's Aids;

❖ The Actor's Relationship with other Members of the Production.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Analyze a text in order to explore character traits, genre, and tone;
- Practice major acting techniques;
- Apply vocal techniques in creating characters; and
- Perform improvisational skills for stage and film acting and recognize the difference between film and stage acting.

TARGET PARTICIPANTS

Teachers, Stage actors/actresses, any individual interested in acting for film and stage.

14.2 FUNDAMENTALS OF STAGE DIRECTING

COURSE OBJECTIVES

The aim of the course is to introduce participants to the fundamentals of play directing.

KEY TOPICS

- The Director and the play;
- Approaches of the director;
- The production Process; and
- The Director and the Theatrical space.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Apply the directorial skills and techniques in reading, analyzing and interpreting the text (play); and
- Direct a 5 minutes play.

TARGET PARTICIPANTS

Theatre directors, any individual who aspires to become a theatre/stage director.

14.3 FUNDAMENTALS OF DANCE CHOREOGRAPHY

COURSE OBJECTIVES

The aim of this course is to teach participants techniques of performing different African traditional and contemporary dance styles.

KEY TOPICS

- Dance movement/choreography/techniques;
- Dance rhythms/styles;
- Song in African dance;
- Dance Costumes; and
- Creation of a dance piece.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Create a dance piece.

TARGET PARTICIPANTS

Actors/actresses, any person interested in dance.

14.4 FUNDAMENTAL OF THEATRE (PLAY) PRODUCTION

COURSE OBJECTIVES

To produce plays for the theatre.

KEY TOPICS

- Transposing the Script on Stage;
- Casting and Rehearsals;
- Technical and Dress Rehearsals;
- Production Organization;
- Improvising for the Stage; and
- Publicizing a Play.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Mount a production and oversee various theatrical chores ranging from acting, directing, designing of costumes, lighting, props and managing publicity.

TARGET PARTICIPANTS

Teachers, any individual interested in play production.

14.5 WRITING FOR STAGE PLAYS

COURSE OBJECTIVES

The course aims to impart to the participants basic skills of writing for stage plays.

KEY TOPICS

- Creative Process;
- Constituents of a play;
- Laying spaces; and
- Creating a stage play.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Write a one act play.

TARGET PARTICIPANTS

Theatre/stage plays writers, any individual who aspires to become a stage play writer.

14.6 WRITING FOR RADIO PLAYS

COURSE OBJECTIVES

The course aims to impart to the participants basic skills of writing for radio plays.

KEY TOPICS

- Understanding the Creative Process;
- Script layout for a radio play;
- Voice/Sound for Radio;
- Sound effects in radio drama;
- Music selection and layout;
- Playing spaces;
- Constituents of a radio play; and
- Creating a radio play.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Apply the acquired skills in writing a 5 minutes Radio Play.

TARGET GROUP

Any individual who is interested in becoming a radio play writer.

15.0 MUSIC



15.1 WRITING AND READING MUSIC NOTATION

15.2 BASIC METHODS OF TEACHING MUSIC SUBJECTS IN SCHOOLS

15.3 TECHNIQUES OF PLAYING MUSIC INSTRUMENTS

15.4 VOICE PRODUCTION (SINGING)

15.1 WRITING AND READING MUSIC NOTATION

COURSE OBJECTIVES

This course aims at introducing individuals to basic music concepts and skills in reading and writing music notations.

KEY TOPICS

- Note values, pitches, rhythm;
- Intervals, melodic line; and
- Sight reading.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Read and write simple music notation.

TARGET GROUP

Teachers, singers, instrumentalists, cultural officers.

15.2 BASIC METHODS OF TEACHING MUSIC SUBJECTS IN SCHOOLS

COURSE OBJECTIVES

This course aims at equipping teachers with skills for teaching music subject.

KEY TOPICS

- Approaches of teaching songs;
- Approaches of teaching games;
- Approaches of teaching instruments; and
- Components of a music lesson plan.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Teach music applying a music lesson plan.

TARGET GROUP

Music teachers.

15.3 TECHNIQUES OF PLAYING MUSIC INSTRUMENTS

COURSE OBJECTIVES

This course aims at introducing and developing an individuals' skills and techniques in playing the keyboard, guitar, drum, and brass instruments (trumpet, trombone and tuba).

KEYTOPICS

❖ **Keyboards**

- Scales and Arpeggios (C, G, and F Major and Am, Em and Dm); and
- Solo playing or Duet pieces at the level of grade 1-4.

❖ **Guitar**

- Chords at position one: C, G, D, E, A and F Major and Am, Em, Dm, Fm and Brn; Scales: C, G, D and F and Am, Em and Dm; and
- Solo playing at the level of grade 1-4.

❖ **Brasses and Trumpets**

- Scales and arpeggios: C, G, and F Major Am, Em and Om;
- Solo playing at the level of grade 1-4;
- Trombone and/or tuba; and
- Scales and arpeggios: Bb, F, and G Major Gm, Dm and Em.

❖ **Drums**

- Selected Tanzanian traditional drums and Modern drum kit. Selected styles from different music cultures in Tanzania: e.g. Bugobogobo, Mdundiko, Sindimba, muheme and Lipenenga; and
- Playing solo pieces or in an ensemble.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Play the named instruments at the basic or intermediate level (approximately at the level of grades I- 4).

TARGET GROUP

Teachers, instrumentalists, cultural officers, music people.

15.4 VOICE PRODUCTION (SINGING)

COURSE OBJECTIVES

This course aims at equipping individuals with voice production skills and techniques.

KEY TOPICS

- Vocal range;
- Breath control and body posture;
- Diction;
- Balance; and
- Dynamics.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Produce good voice.

TARGET GROUP

Teachers, choir singers, bongo flewa singers, dance music singers and any other music singers.

16.0 INFORMATION SYSTEM



16.1 ELECTRONIC RECORDS AND INFORMATION SYSTEMS MANAGEMENT

16.2 ADVANCED ARCHIVES MANAGEMENT AND DOCUMENTATION
PRODUCTION

16.1 ELECTRONIC RECORDS AND INFORMATION SYSTEMS MANAGEMENT

COURSE OBJECTIVES

This course aims at equipping participants with the knowledge to understand the concept of electronic records management.

KEY TOPICS

- Concept of Electronic Records Management;
- Electronic records management business drivers;
- Impact of electronic records management on users;
- Resources and responsibilities for implementing electronic records management; and
- Implications of an electronic records management strategic decision;

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following::

- Understand the concept of electronic records management;
- Explore electronic records management business drivers;
- Best Practice electronic records management;
- Demonstrate the impact of electronic records management on users;
- Identify necessary resources and responsibilities for implementing electronic records management;
- Explore implications of an electronic records management strategic decision; and
- Gain commitment for change.

TARGET GROUP

Records Managers/Officers, Records and Information Management Specialists, Records Clerks and other employees from Private, NGOs and Public Sectors who are responsible for managing records.

16.2 ADVANCED ARCHIVES MANAGEMENT AND DOCUMENTATION PRODUCTION

COURSE OBJECTIVES

The course aims at equipping participants with a knowledge to understand the difference between the responsibilities and activities of Archivists and Records Managers, understand the Influence of the institutional contexts in which documents are created, used and retained.

KEY TOPICS

- Difference between the responsibilities and activities of Archivists and Records Managers;
- Influence of the institutional contexts in which documents are created, used and retained;
- Changing definitions of records as information or evidence;
- Process by which records serve organizational needs;
- Uses of records by organisations for accountability; and
- Role of archivists and records managers in the society.

LEARNING OUTCOME

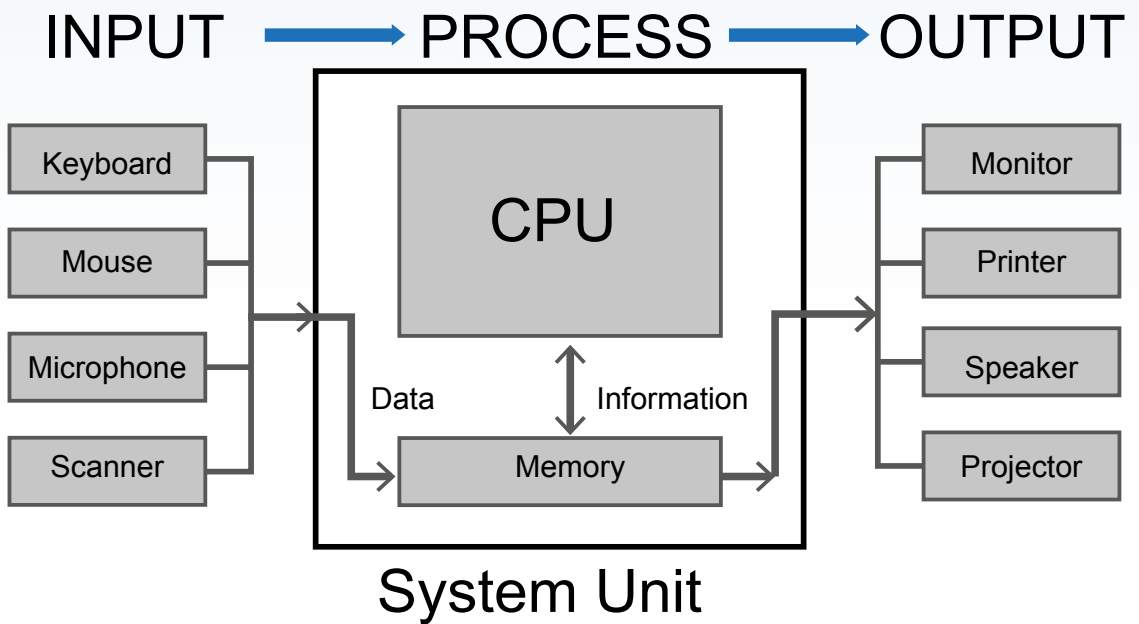
By the end of the course participants are expected to have gained the following:

- Understand the difference between the responsibilities and activities of Archivists and Records Managers;
- Understand the Influence of the institutional contexts in which documents are created, used and retained;
- Analyze the changing definitions of records as information or evidence;
- Analyze the process by which records serve organizational needs;
- Examine the uses of records by organisations for accountability; and
- Articulate the role of archivists and records managers in the society

TARGET GROUP

The course is specifically tailored to Records Managers/Officers, Records and Information Management Specialists, Records Clerks, and other employees from private, NGOs and public sectors who are responsible for management of records.

17.0 BASIC COMPUTER



17.1 COMPUTER APPLICATIONS AND OFFICE SYSTEMS FOR SECRETARIES AND ADMINISTRATIVE STAFF

17.1 COMPUTER APPLICATIONS AND OFFICE SYSTEMS FOR SECRETARIES AND ADMINISTRATIVE STAFF

COURSE OBJECTIVES

The course aims at equipping participants with knowledge to understand how to protect computers from viruses, spyware and hardware.

KEY TOPICS

- Basic features of Microsoft Office;
- Windows basic and file management;
- How to integrate computers to facilitate office systems and procedures;
- How to protect computers from viruses, spyware and adware;
- How to formulate and organize office files and worksheets for office use;
- How to customize windows interface, installing/uninstalling software, speeding up operating systems;
- How to maintain and run a PC; and
- Basic features of Microsoft access and database management concepts.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Practice Basic features of Microsoft Office,
- Run Windows basic and file management;
- Integrate computers to facilitate office systems and procedures;
- Protect computers from viruses, spyware and adware;
- Formulate and organise office files and worksheets for office use;
- Customise windows interface, installing/uninstalling software, speeding up operating systems;
- Maintain and run a PC; and
- Practice Basic features of Microsoft access and database management concepts.

TARGET GROUP

Office Management Secretaries, Administrative Assistants and Personal Assistants.

18.0 DOCUMENT FORMATTING

Before



After



18.1 DOCUMENT FORMATTING/MICROSOFT WORD SKILLS FOR LARGE DOCUMENT

18.1 DOCUMENT FORMATTING /MICROSOFT WORD SKILLS FOR LARGE DOCUMENT

COURSE OBJECTIVES

The course aims at equipping participants with skills to create a good thesis/ dissertation template according to the need or regulations and rules of their institution and help students acquire better MS Word skills for large documents that will enable them to write properly and navigate through the document easily.

KEY TOPICS

- Hanging bibliography;
- Page layout;
- Tables;
- Styles;
- Flow charts/smart art;
- Chapter headings;
- Screen clipping & screenshots;
- Captions;
- Outline view;
- Footnotes;
- Master documents;
- Numbered lists;
- Page breaks/section breaks;
- Non-breakings spaces;
- Blank pages;
- Page numbers;
- Table of contents/list of figures/list of tables;
- Spelling and grammar;
- Columns and borders;
- Track changes;
- Find and replace;
- Cross-reference;
- Citations & managing sources;
- Bookmarks;
- Hyperlinks;
- Excel charts in word;
- Templates; and
- General formatting for theses and dissertations.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Clear understanding of Microsoft word Office and the ability to use it effectively for writing reports and large documents e.g. dissertations and theses.

TARGET GROUP

Postgraduate students (masters and doctoral), especially the ones who have started writing their theses and dissertations.

19.0 INFORMATION STUDIES PROGRAMME



19.1 ELECTRONIC RECORD MGT

19.2 DIGITIZATION FOR LIBRARIES AND INFORMATION INSTITUTION

19.3 INFORMATION LITERACY PEDAGOGICAL SKILLS COURSE FOR
TRAINERS

19.4 INFORMATION SKILLS COURSE FOR IMPROVING RESEARCH TOPICS/
INFORMATION PROBLEMS AND LITERATURE REVIEW

19.1 ELECTRONIC RECORDS MANAGEMENT

COURSE OBJECTIVES

This course gives a thorough understanding of how to best automate the way electronic records are identified, captured, and classified as e-records for automation purposes.

KEY TOPICS

Basic principles of electronic records management.

- Different types of electronic records;
- Capturing electronic records;
- Email management;
- Metadata, its uses and sources and methods for collecting and applying metadata;
- An overview of ISO 15489;
- Creating e-records inventory and information to be collected;
- Classification concepts and schemes used for e-records;
- The approaches to automating records holds and records collections and automating the disposition of electronic records;
- Approaches to searching for and retrieving e-records;
- Retention and disposition: methods of exporting, transferring and disposing of e-records; and
- Approaches to digital preservation and the steps required to perform a migration.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Identify, capture, classify, transfer and or dispose electronic records;
- Use records classification schemes, controlled vocabularies, and metadata models for managing records;
- Automate management of electronic records by applying appropriate metadata standards; and
- Plan defensible and secure retention and disposition of electronic records.

TARGET GROUP

Information, records, human resource managers, administrators, record clerks in government ministries, agencies, NGO, Public and Private Organizations

19.2 DIGITIZATION FOR LIBRARIES AND INFORMATION INSTITUTIONS

COURSE OBJECTIVES

This course is a practice-led introduction to the digitization of information resources in libraries and information institutions. It aims at providing practical hands on training to understand the technical underpinnings and practical application of digitization in the library and information service environments

KEY TOPICS

- Overview of digitization;
- File formats;
- Digitization tools;
- Digitization techniques;
- Digitization planning process;
- Metadata standards;
- Digitization and copyright issues;
- Assessments of objects for digitization;
- Image processing;
- Overview of FOSS for digitization project;
- Overview of Dspace;
- Metadata creation & uploading of digital documents; and
- Metadata creation, uploading of digital documents & preservation issues.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following::

- Understand the importance of digitization in libraries and information institutions;
- Familiarize with the technical underpinnings of digitization, including capture methods, file formats, compression methods, etc.;
- Assess objects for digitization, and understand handling conditions;
- Understand metadata and preservation issues related to digitization;
- Have an awareness of the complete digitization life cycle; and
- Familiarize with key digitization technologies: both hardware and software.

TARGET GROUP

Librarians and other information professionals involved in digitization of information resources.

19.3 INFORMATION LITERACY PEDAGOGICAL SKILLS COURSE FOR TRAINERS

COURSE OBJECTIVES

The course aims at equipping participants with a knowledge to understand the delivery of learner-centered information literacy training.

KEY TOPICS

- Learning experiences & preferences;
- The trainer as a facilitator;
- The behaviour of a facilitator;
- Training needs assessment;
- Planning the IL training session;
- Customisation of training materials;
- Planning IL training using existing materials;
- Technology to assist in IL training;
- Logistics of IL training;
- Reflective practice and reflective journals; and
- M&E of IL training.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Ability to make IL training learner-centred and engaging;
- Confidence in delivering IL training;
- Knowledge of pedagogical theory relevant to IL;
- Ability (and motivation) to plan IL training; and
- Strategies for dealing with participant behaviour.

TARGET GROUP

Academic staff, Librarians and information professionals as well as others who are involved in teaching information literacy

19.4 INFORMATION LITERACY SKILLS COURSE FOR IMPROVING RESEARCH TOPICS /INFORMATION PROBLEMS AND LITERATURE REVIEW

COURSE OBJECTIVES

The course aims at helping participants understand information literature skills for improving their research topics, problems and literature review.

KEY TOPICS

- Refining a research topic/an information problem;
- Sources to familiarize with a research topic or problem;
- Sources of Information relevant to a research topic/problem;
- Effective literature searching techniques;
- Critical appraisal of research literature;
- Organize literature for effective use;
- Presentation techniques for results of the critically appraised topic/problem; and
- Citation styles and the management of references.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Redefine research topics/information problems and familiarize with related research topics;
- Identify a variety of types and formats of potential sources of information;
- Understand ways by which literature review is carried out;
- Effectively search for literature relevant to research topics/information problems;
- Critically appraise literature relevant to a research topic/information problems;
- Organize literature and use it effectively; and
- Cite sources following accepted citation styles and avoid plagiarism.

TARGET GROUP

This is an information literacy course designed for students undertaking course assignments or Researchers who are carrying out research.

20.0 BOTANY



20.1 PLANT TISSUE CULTURE

20.2 BASIC PRINCIPLES OF PLANT IDENTIFICATION

20.3 PLANT CLASSIFICATION FOR SECONDARY SCHOOL BIOLOGY

20.1 PLANT TISSUE CULTURE

COURSE OBJECTIVES

The course aims at equipping participants with developing knowledge and skills in plant tissue culture and translate the basic aspect of plant tissue culture into commercial application.

KEY TOPICS

- Familiarization of Plant tissue culture Laboratory;
- Preparation of stock solution and media (Murashige and Skoog media);
- Aseptic (sterile) technique and explant preparation;
- Micropropagation techniques for shoot induction and multiplication and rooting of shoots;
- Plantlets acclimatization (Hardening of plants); and
- Commercial application of plant tissue culture.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Explain the nature of plant growth processes in tissue culture;
- Point out specific growing media to use for plant micropropagation;
- Manage sterile or aseptic environment for plant tissue culture;
- Specify appropriate micropropagation procedures for different purposes; and
- Design a layout for commercial tissue culture facility.

TARGET GROUP

Agriculture entrepreneurs, agriculture scientists, botanists, biotechnologists, agriculture government officials, private sectors, fresh graduates and students.

20.2 BASIC PRINCIPLES OF PLANT IDENTIFICATION

COURSE OBJECTIVES

The course aims at equipping participants with knowledge to identify common plants in their respective areas of work

KEY TOPICS

- Definition of Plants;
- Importance of plants in an Ecosystem;
- The lower and higher plants;
- Major parts of typical plants;
- Parts of plants used during morphological identification;
- A general survey of plants in Tanzania; and
- Plant species of conservation concern in Tanzania.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Identify common plants in their respective areas;
- Describe the major families of plants;
- Distinguish indigenous from exotic plant species;
- Explain the general characteristics of important plants; and
- Understand important plants of conservation concern in Tanzania.

TARGET GROUP

Tour guides, Tourism college graduates, Tour Operators Company Drivers, Nature Reserves Staff and students.

20.3 PLANT CLASSIFICATION FOR SECONDARY SCHOOL BIOLOGY TEACHERS

COURSE OBJECTIVES

The course aims at equipping participants with knowledge to enable secondary school biology teachers to enrich their understanding of the different groups of plants (lower and higher plants).

KEY TOPICS

- An overview of plant kingdom;
- Major groups of plants based on their habitats;
- General and distinguishing characteristics of the major groups of plants;
- Classification of plants;
- Major habitats that support the different plant groups;
- Preparation of practicals to study plants; and
- Plants with interesting responses eg *Mimosa pudica*.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Name the major groups of plants (lower and higher);
- Explain the general and distinguishing features of major plant groups;
- Classify plants from evolutionary point of view; and
- Prepare practicals about plants with confidence.

TARGET GROUP

Biology teachers from Secondary Schools (public and private), any one with interest on plants provided she/he can speak English.

21.0 CHEMICAL AND MINING ENGINEERING



21.1 RISK MANAGEMENT FOR CHEMICAL INDUSTRIES

21.2 MODISM SOFTWARE APPLICATION FOR MINERAL PROCESS, PLANT DESIGN AND OPTIMIZATION

21.3 INTRODUCTORY MINE INVESTMENT, LAWS AND REGULATION IN TANZANIA

21.4 SIZING AND SELECTION OF SMALL SCALE MINING AND MINERAL PROCESSING EQUIPMENT

21.1 RISK MANAGEMENT FOR CHEMICAL INDUSTRIES

COURSE OBJECTIVES

The course aims at equipping participants with knowledge on risk management (minimise the occurrence and consequences of accidents) since accidents are likely to occur in any industry.

KEY TOPICS

- Hazard identification and assessment;
- Risk assessment;
- Fire and Explosion; and
- Accident investigation.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- To conduct risk (health, safety, ecological) assessments and appreciate the wide array of applications, as well as the advantages and limitations of risk assessments;
- Interpret and present results of risk analysis, assessments and understand linkages of the results to risk management; and
- Apply principles of integrated risk management in their daily work.

TARGET GROUP

Process Engineers.

21.2 MODSIM SOFTWARE APPLICATION FOR MINERAL PROCESS PLANT DESIGN AND OPTIMIZATION

COURSE OBJECTIVES

- Learn to use MODSIM Mineral Processing Simulator;
- Learn the tools, facilities, and power of the simulator. IZI Construct flow sheets and data input;
- Mass balance plant data;
- Conduct simulations;
- Utilizing MODSIM output in reports;
- Plant optimization studies;
- Understand the basics of comminution and classification models; and
- Model scope, limitations, and usability.

KEY TOPICS

- Overview of MODSIM and modeling of mineral processing unit operations;
- Computerized simulation fundamentals;
- Mass balancing as a tool for plant design, optimization, metallurgical accounting and general data analysis;
- Review of MODSIM models, including cyclones, ball mills, SAG/AG mills, crushers and screens; and
- Incorporating laboratory breakage test results and pilot data into simulations aimed at new plant design or existing plant upgrades.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

The attendee will be able to design process flow sheet or plant Optimization of combination processes using software sizing of Equipment used in mineral processing plant

TARGET GROUP

This course is aimed at Metallurgists, Met Managers and equipment supplier engineers who are serious users of modeling and simulation software. It is also for the former users of MODSIM who want to refresh on the same.

21.3 INTRODUCTORY MINE INVESTMENT, LAWS AND REGULATIONS IN TANZANIA

COURSE OBJECTIVES

- To provide an overview of mine activities;
- To introduce the attendee with mine regulations and laws requirements when investing in the mining industry;
- To explore the opportunities created by mining industry to locals; and
- To explain the stages required for mine investment and tools that are used for evaluation.

KEY TOPICS

- Introduce the concept of laws and regulations governing mining activities in Tanzania;
- Concept of mineral occurrences and valuation;
- Investment analysis tools for mine projects;
- Compliance and reporting rules for mine projects; and
- Stakeholders involvement in mine projects and the elements of sustainable mining.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- The attendee is expected to gain knowledge about compliance of mine laws and regulations for investment in Tanzania;
- Be able to make informed decisions about investment for mine projects; and
- Identify opportunities worth investing by locals in areas with mine projects.

TARGET GROUP

- General audience interested in investing in mine projects, small to medium scale;
- Funders/organization who need knowledge about mining and operations but are interested to move into mine project investment; and
- Small scale miners who are interested to scale up their mine projects.

21.4 SIZING AND SELECTION OF SMALL SCALE MINING AND MINERAL PROCESSING EQUIPMENT

COURSE OBJECTIVES

The course aims at equipping participants with knowledge to enable small scale miners, understand proper methods applied in the sizing and selection of key mining and mineral processing equipment.

- Sizing and selection of air compressors;
- Sizing and selection of drilling machines;
- Sizing and selection of power generators;
- Sizing and selection of pumps;
- Sizing and selection of crushers;
- Sizing and selection of ball mills;
- Sizing and selection of vat leach tanks;
- Sizing and selection of motors; and
- Sizing and selection of shaking tables and screens.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- An understanding on the proper sizing and selection of mining and mineral processing equipment based on ore type treated and the throughput/production rate.

TARGET GROUP

Small and medium scale miners.

22.0 TAALUMA ZA KISWAHILI



22.1 KOZI ZA MAFUNZO YA MBINU NA MATUMIZI YA KISWAHILI KWA
WANAHABARI ZA KISWAHILI

22.1 KOZI YA MAFUNZO YA MBINU NA MATUMIZI YA KISWAHILI KWA WANAHABARI ZA KISWAHILI

MADHUMUNI YA KOZI

Kozi hii inahusika na mbinu na matumizi ya Kiswahili kwa ujumla, lakini inatilia mkazo zaidi uandishi, shabaha kuu ikiwa ni makosa ya kijumla na mahususi ya uandishi wa habari za Kiswahili katika vyombo mbalimbali kama vile televisheni, redio, na magazeti. Makosa ya kijumla yanayoshughulikiwa ni ya kimpangilio na kimitiririko; na makosa mahususi yanahusiana na kanuni za utamkaji wa maneno, uumbaji wa maneno, uundaji wa sentensi na aya, uteuzi wa msamiati, ukataji na uendelezaji maneno pamoja na utumizi wa viakifishi na alama nyingine za uandishi. Madhumuni makuu ni kuwawezesha washiriki kukuza stadi za uandishi, na hususani matumizi fasaha ya lugha, katika aina zake mbalimbali.

MADA

- Uandishi kwa ujumla;
- Kanuni za uandishi;
- Matatizo katika Uandishi wa Habari za Kiswahili; na
- Vyanzo vya matatizo ya kiuandishi na jinsi ya kuyaepuka.

MATARAJIO YA KOZI

Mwisho wa kozi washiriki wanatarajiwa kuwa wamepata yafuatayo:

- Watajenga misingi imara ya uandishi; na
- Wataweza kuandika habari na machapisho mengine kwa kuzingatia kanuni za uandishi bora.

WALENGWA WA KOZI

Kutokana na ukweli kwamba kukua na kupanuka kwa matumizi ya Kiswahili kumeenda sambamba na kuzuka kwa makosa mengi ya kisarufi na kimantiki yanayoathiri ubora wa habari katika vyombo husika, kozi hii inawalenga wanahabari wote, wakiwamo waandishi, watangazaji na wahariri kutoka vituo vya runinga, redio, magazeti ya Kiswahili na waendeshaji wa blogu mbalimbali.

Kwa kuzingatia kwamba baadhi ya wanahabari ni waajiriwa na kwamba muda wa asubuhi wanakuwa kazini kozi hii itafundishwa kwa mtindo wa mwendokasi siku tano za kazi kuanzia saa 10 alasiri hadi saa 1 usiku kwa majuma matatu.

23.0 JOURNALISM AND MASS COMMUNICATION



23.1 FUNDAMENTALS/COMMUNICATION STRATEGY

23.2 CORPORATE COMMUNICATION

23.3 WRITING FOR WEB AND SOCIAL MEDIA

23.4 HANDLING MEDIA INTERVIEWS

23.1 FUNDAMENTALS OF COMMUNICATION STRATEGIES

COURSE OBJECTIVES

The course aims at equipping participants to train communication/information officers on how to prepare and develop viable communication strategies.

TOPICS TO BE TAUGHT

- Communication mapping;
- Identifying communication opportunities;
- Setting out communication objectives;
- Developing communication messages;
- Identifying communication channels;
- Developing strategies; and
- Budgeting as well as M&E.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Prepare, develop and implement viable communication strategies;
- Budget for CS; and
- M & E communication strategies.

TARGET GROUP

Communication/information officers.

23.2 CORPORATE COMMUNICATION

COURSE OBJECTIVES

The course aims at equipping communication practitioners with necessary skills to handle communication in the corporate world.

TOPICS

- Understanding corporate communication;
- Tools of corporate communication;
- Types of communication in an organisation; and
- Communication policies and crisis communication.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Prepare, develop and implement communication policies for branding and protecting corporate images;
- Apply corporate communication tools effectively;
- Account for different types of communication in an organization; and
- Handle crises in corporate companies by using communication.

TARGET GROUP

Corporate Communication Practitioners.

23.3 WRITING FOR THE WEB AND SOCIAL MEDIA

COURSE OBJECTIVES

The course aims at equipping participants with knowledge on how the web and social media operate and the challenges that may emerge in the operation.

TOPICS

- Understanding web and social media audience;
- Information foraging and informavores;
- Writing skills for the web and social media;
- Social media and brand content;
- Coping with information speed; and
- Fake news and verification.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Prepare contents for the web or social media
- Handle fake news and verify information that is circulated through the web or social media.
- Identify and overcome web and social media challenges.
- Manage huge volumes of information for quality assurance.

TARGET GROUP

Communication managers and other practitioners

23.4 HANDLING MEDIA INTERVIEWS

COURSE OBJECTIVES

The course aims at equipping participants with knowledge that will help them manage media interviews.

TOPICS

- Why media matters;
- Understanding journalists desires;
- Developing key messages;
- Passing cynic test;
- How to commit news;
- Handling negative questions; and
- Body and look.

LEARNING OUTCOME

By the end of the course participants are expected to have gained the following:

- Prepare effectively for media interviews.
- Handle diverse media personalities.
- Manage time effectively during interview.
- Response body language

TARGET GROUP

Senior managers, Middle level managers in organisations, Politicians and those who interact with media.

24.0 UNIVERSITY CONSULTANCY BUREAU (UCB)



24.1 HOW TO RESPOND TO EXPRESSIONS OF INTERESTS AND PREPARATION OF TECHNICAL AND FINANCIAL PROPOSALS

24.1 HOW TO RESPOND TO EXPRESSION OF INTEREST AND PREPARATION OF TECHNICAL AND FINANCIAL PROPOSALS

COURSE OBJECTIVES

- To impart skills on the purpose of consultancy assignments and the process for undertaking consultancy projects;
- To enable the participants learn through practice how to respond to Expression of Interest successfully;
- To enable the participants learn through practice how to respond to request for Proposals successfully; and
- To enable the participants to prepare budgets for undertaking consultancy projects in more competitive manner.

TOPICS/COVERAGE

- Understanding Consultancy Assignments;
- Consulting Process;
- Understanding Expressions of Interest;
- Case Analysis on the Expression of Interest;
- Understanding Request for Proposals;
- Writing a Financial Proposal for RFPs; and
- Tender Document Packaging and Response for Failure.

LEARNING OUTCOME

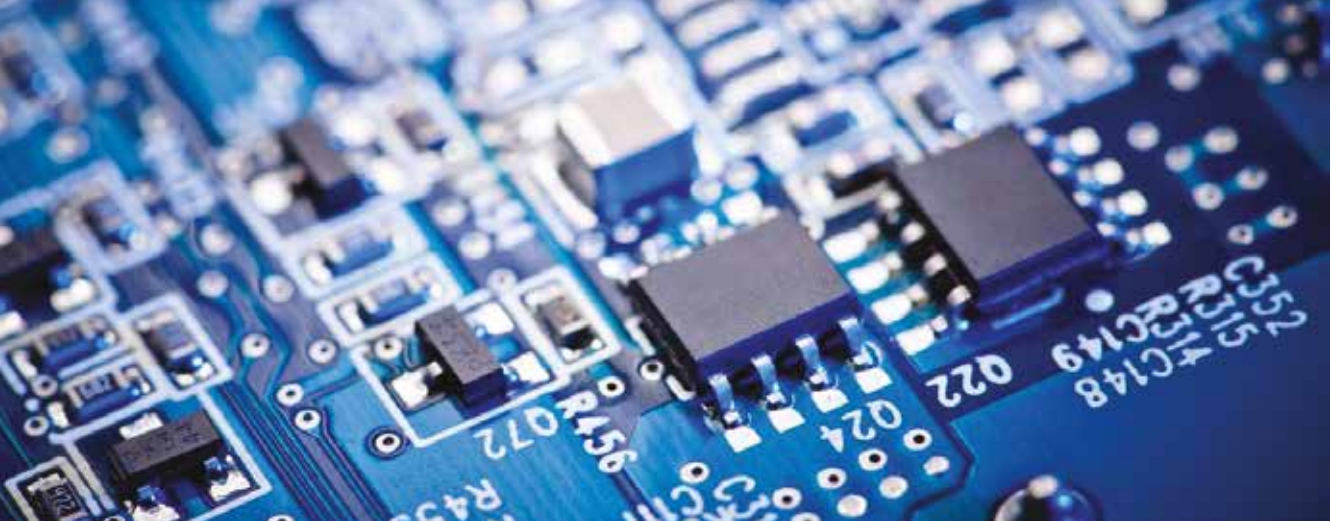
By the end of the course participants are expected to have gained the following:

- Clear understanding of the Expression of Interest and preparation of Technical and Financial Proposals.

TARGET GROUP

Anybody who wants to get Consultancy Skills.

25.0 ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING



- 25.1 BIOMEDICAL EQUIPMENT REPAIR AND MAINTENANCE
- 25.2 FIBER OPTICS NETWORK DESIGN
- 25.3 FIBER INSTALLATION AND MAINTENANCE
- 25.4 SAFETY AND EXPLOSION PROTECTION IN INDUSTRIAL PROCESSES
- 25.5 BASIC MOBILE PHONE REPAIR AND MAINTENANCE
- 25.6 INTERMEDIATE MOBILE PHONE REPAIR AND MAINTENANCE
- 25.7 ADVANCED MOBILE PHONE REPAIR AND MAINTENANCE
- 25.8 SOLAR ELECTRONICS FOR DOMESTIC AND INDUSTRIAL APPLICATIONS
- 25.9 ARDUINO PROGRAMMING FOR IOT INDUSTRIAL APPLICATION
- 25.10 AUDIO AMPLIFIER DESIGN AND CONSTRUCTION
- 25.11 LAPTOP AND PC REPAIR AND MAINTENANCE
- 25.12 COMPUTER NETWORKING
- 25.13 PRINTED CIRCUIT AND BODY DESIGN
- 25.14 E HEALTH INDUSTRIAL DEVICE: FROM CONSTRUCTION AND QUALITY CONTROL FOR COMMERCIALIZATION
- 25.15 TV SIGNAL RECEPTION AND DISTRIBUTION SYSTEM

25.1 BIOMEDICAL EQUIPMENT REPAIR AND MAINTENANCE

COURSE OBJECTIVES

The course aims at equipping participants with developing knowledge and practical skills of repairing and maintenance of biomedical equipment.

KEY TOPICS

- Fundamentals of repair and maintenance of biomedical equipment;
- Theory and principle of operation of biomedical equipment;
- Measuring, recording, and monitoring equipment: ECG, Pulse Oximeter, Cardiac Monitor, and Multi- Parameter Monitor;
- Modern imaging systems: ultrasound, X-Ray, CT, MRI, and PET;
- Clinical laboratory equipment: Spectrophotometer, Semi & Fully Automatic Analyzers, Calorimeter, Microscope, and Centrifuge;
- Therapeutic equipment: Cardiac Defibrillator, Short Wave Diathermy, and Ultrasonic Diathermy;
- Artificial intelligence in medicine;
- Computerized Maintenance Management System (CMMS); and
- Hands-on repair and maintenance of selected biomedical equipment.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe theory and principal of operation of biomedical equipment;
- To repair and maintain biomedical equipment;
- To describe roles of artificial intelligence in sophisticated biomedical equipment; and
- To apply computerized maintenance management system.

TARGET GROUP

Biomedical engineers and University students/graduates in electronics science and engineering fields.

25.2 FIBER OPTICS NETWORK DESIGN

COURSE OBJECTIVES

The course aims at equipping participants with theories and practical skills of designing fiber optics networks.

KEY TOPICS

- Introduction to fiber optics communication;
- Introduction to Fiber Network Design;
- Communication systems;
- PON and FTTX;
- Cabling standards;
- Transmission equipment;
- Route planning and material list creation;
- Link budget analysis;
- Project documentation; and
- Industrial visit to Telecommunication Company.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe principles of fiber network design and communication systems;
- To describe PON/ FTTX, cabling standards, and transmission equipment;
- To plan routes and create material list;
- To analyze link budget; and
- To establish project documentation.

TARGET GROUP

Telecommunications and technology industries.

25.3 FIBER INSTALLATION AND MAINTENANCE

COURSE OBJECTIVES

The course aims at equipping participants with knowledge and industrial practical skills on fiber installation and maintenance.

KEY TOPICS

- Introduction to fiber optics;
- Basics of fiber communication systems;
- Optical transceivers;
- Optical networks in terrestrial environments and cable installation;
- Splicing techniques;
- Fiber links troubleshooting using OTDR and Power Meters;
- Multiplexing techniques; and
- Industrial visit to a Telecommunications Company.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe advanced concepts of fiber optics and associated communication systems;
- To describe optical transceivers and optical networks in terrestrial environments;
- To install fiber optical cables;
- To describe splicing techniques and apply them to splice fiber cables;
- To troubleshoot fiber links using advanced OTDR meters; and
- To describe multiplexing techniques in fiber optics systems.

TARGET GROUP

Engineers and technicians in Telecommunications and technology industries.

25.4 SAFETY AND EXPLOSION PROTECTION IN INDUSTRIAL PROCESSES

COURSE OBJECTIVES

The course aims at equipping participants with practical knowledge on safety and mitigation of explosions in industrial processes.

KEY TOPICS

- Basic principles of Ex protection;
- Ex zones (classification and marking);
- Explosion groups and temperature classes;
- Explosion protected electrical devices;
- Installation and maintenance of explosion protected electrical devices; and
- Directives of ATEX (2014/34/UE and 1999/92/EC), EN and IECEx standards (60079 and 80079).

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe fundamental principles of Ex protection;
- To classify and mark Ex zones;
- To describe and apply explosion protected electrical devices;
- To install and maintain explosion protected electrical devices; and
- To explain directives of ATEX (2014/34/UE and 1999/92/EC), EN and IECEx standards (60079 and 80079).

TARGET GROUP

Engineers and technicians in explosion-prone industries, including oil and gas industries.

25.5 BASIC MOBILE PHONE REPAIR AND MAINTENANCE

COURSE OBJECTIVES

The course aims at equipping participants with basic skills of repairing and maintaining mobile phones.

KEY TOPICS

- Identification and description of functions of passive and active components;
- General maintenance of mobile phone components;
- Architecture and classification of mobile phones; and
- Troubleshooting mobile phones.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To identify and describe functions of active and passive components;
- To perform general maintenance of mobile phone components;
- To describe architecture and classification of mobile phones; and
- To troubleshoot mobile phones.

TARGET GROUP

Practitioners and technicians in mobile phone repair and maintenance and hobbyists with interest to join the mobile phone repair and maintenance industry.

25.6 INTERMEDIATE MOBILE PHONE REPAIR AND MAINTENANCE

COURSE OBJECTIVES

The course aims at equipping participants with intermediate skills of repairing and maintaining mobile phones.

KEY TOPICS

- Disassembling and assembling of mobile phone components;
- Middle-level repair and maintenance tools;
- Troubleshooting techniques; and
- Repair and maintenance of hardware and software components.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To disassemble and assemble mobile phones;
- To describe middle-level repair and maintenance tools; and
- To troubleshoot, repair, and perform maintenance of hardware and software components of mobile phones.

TARGET GROUP

Practitioners and technicians in mobile phone repair and maintenance and hobbyists with interest to join the mobile phone repair and maintenance industry.

25.7 ADVANCED MOBILE PHONE REPAIR AND MAINTENANCE

COURSE OBJECTIVES

The course aims at equipping participants with advanced skills of repairing and maintaining mobile phones.

KEY TOPICS

- Advanced mobile phone repair tools;
- Entrepreneurial career in mobile phone repair and maintenance;
- Local and international ethics in electronic communication equipment; and
- Regulatory authorities and regulatory requirements governing electronic communication equipment.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe and apply advanced mobile phone repair tools;
- To develop entrepreneurial career in mobile phone repair and maintenance;
- To describe and apply local and international ethics in electronic communication equipment; and
- To describe regulatory requirements that govern electronic communication equipment.

TARGET GROUP

Practitioners and technicians in mobile phone repair and maintenance and hobbyists with interest to join the mobile phone repair and maintenance industry.

25.8 SOLAR ELECTRONICS FOR DOMESTIC AND INDUSTRIAL APPLICATIONS

COURSE OBJECTIVES

The course aims at equipping participants with knowledge to apply concepts of solar electronics to design and implement domestic and industrial solar systems.

KEY TOPICS

- Fundamentals of solar electronics;
- Domestic and industrial architectures of electrical solar systems;
- Design and implementation of solar charger controllers;
- Design and implementation of solar inverters; and
- Installation of solar and backup systems.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe basic principles of solar electronics;
- To describe domestic and industrial architectures of electrical solar systems;
- To design and implement solar charger controllers;
- To design and implement solar inverters; and
- To install solar and backup systems.

TARGET GROUP

Practitioners and technicians in solar electrical systems industries.

25.9 ARDUINO PROGRAMMING FOR IOT INDUSTRIAL APPLICATION

COURSE OBJECTIVES

The course aims at equipping participants with knowledge to develop IoT industrial applications using Arduino.

KEY TOPICS

- Architecture, components, and real-world applications of Arduino;
- Arduino interfacing techniques and industrial considerations;
- Arduino programming in embedded C;
- Arduino interfacing with IoT industrial devices; and
- Development of real-world IoT industrial applications with Arduino.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe the architecture, function of components, and real-world applications of Arduino;
- To describe interfacing techniques of Arduino with peripheral devices;
- To program Arduino in embedded C;
- To interface Arduino with IoT industrial devices; and
- To develop real-world IoT industrial applications with Arduino.

TARGET GROUP

Practitioners in intelligent industrial systems design and implementation and University students/graduates in electronics science and engineering fields.

25.10 AUDIO AMPLIFIER DESIGN AND CONSTRUCTION

COURSE OBJECTIVES

The course aims at equipping participants with professional skills of designing and constructing audio amplifiers

KEY TOPICS

- Fundamental design principles of audio amplifiers;
- Tuners, preamps, and audio amplifiers;
- Circuits for matching transformer power ratings;
- Circuits for adjusting gain of audio amplifiers; and
- Amplifier casing and packaging.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe fundamental design principles of audio amplifiers;
- To design and implement tuners, preamps, and audio amplifiers;
- To design and implement circuits for matching transformer power ratings;
- To design and implement circuits for adjusting gain of audio amplifiers; and
- To design and construct amplifier casing.

TARGET GROUP

Practitioners in design and construction of audio amplifiers.

25.11 LAPTOP AND PC REPAIR AND MAINTENANCE

COURSE OBJECTIVES

The course aims at equipping participants with practical knowledge on the repair and maintenance of laptops and personal computers.

KEY TOPICS

- Hardware and software components of laptop and PCs;
- Repair and maintenance guidelines of laptop and PCs;
- Assembling and disassembling of laptop and PCs;
- Troubleshooting techniques;
- Repair and maintenance of components of laptops and PCs; and
- Entrepreneurial career in laptop & PC repair and maintenance.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe hardware and software components of laptops and PCs;
- To describe repair and maintenance guidelines of laptops and PCs;
- To assemble and disassemble laptops and PCs;
- To troubleshoot and repair components of laptops and PCs; and
- To develop entrepreneurial career in laptop & PC repair and maintenance.

TARGET GROUP

Practitioners, system administrators, and technicians in laptop and PC repair and maintenance.

25.12 COMPUTER NETWORKING

COURSE OBJECTIVES

The course aims at equipping participants with fundamental practical skills on computer networking.

KEY TOPICS

- Fundamental computer networking principles;
- Structured cabling and design;
- Installation, termination, and testing of cables; and
- Maintenance and troubleshooting of computer networks.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe fundamental computer networking principles;
- To describe structured cabling and design;
- To install, terminate, and test cables; and
- To perform maintenance and troubleshooting of computer networks.

TARGET GROUP

Computer scientists and engineers and practitioners, system administrators, and technicians in computer networking.

25.13 PRINTED CIRCUIT AND BODY DESIGN

COURSE OBJECTIVES

The course aims at equipping participants with developing professional skills in designing printed circuit boards.

KEY TOPICS

- Fundamental principles of designing Printed Circuit Boards (PCBs);
- Hardware and software requirements for designing PCBs;
- PCB layout, routing, and 3D views generation;
- Gerber files and BOMs production;
- Etching, development, and drilling of PCBs; and
- Assembling and soldering of components on the PCB.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe basic principles of designing Printed Circuit Boards (PCBs);
- To describe hardware and software requirements for designing PCBs;
- To design PCB layout, perform routing, and generate 3D views;
- To generate Gerber files and BOMs for industrial PCB production;
- To perform etching, development, and drilling of PCBs; and
- To assemble and solder components on the PCB.

TARGET GROUP

Practitioners and hobbyists in electronics systems design

25.14 E HEALTH INDUSTRIAL DEVICE: FROM CONSTRUCTION AND QUALITY CONTROL FOR COMMERCIALIZATION

COURSE OBJECTIVES

The course aims at equipping participants with knowledge to construct, maintain quality, and commercialize eHealth industrial devices

KEY TOPICS

- eHealth technologies and innovations;
- Quality and risk management of eHealth devices;
- Development of eHealth industrial devices;
- Commercialization of eHealth industrial devices; and
- Healthcare systems and integration protocol.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- To describe different technologies and innovations in eHealth industries;
- To describe how to manage quality of eHealth devices through regulatory authorities;
- To manage risks in eHealth devices;
- To develop and commercialize eHealth industrial devices; and
- To describe healthcare systems and integration protocol.

TARGET GROUP

Practitioners in eHealth industries, students, technicians, and academic staff in ICT fields.

26.0 CONFUCIUS INSTITUTE



26.1 BASIC CHINESE LEVEL I&II, INTERMEDIATE CHINES LEVEL I&II

26.1 BASIC CHINESE LEVEL I&II, INTERMEDIATE CHINESE LEVEL I&II

COURSE OBJECTIVES

The course aims at equipping participants with a knowledge to meet people's growing need of understanding Chinese language, culture, technology and skills.

KEY TOPICS

- Comprehensive: Reading, writing and listening.

LEARNING OUTCOMES

By the end of the course participants are expected to have gained the following:

- Ask qualified students in a respective level;
- Acquire skills in reading, writing and speaking in Chinese; and
- Understand the Chinese Culture.

TARGET GROUP

Public: All people from age fourteen and above.

DURATION

- Two months for one level (six levels full program).

DELIVERY MODALITY

- Lecture.

COURSE SPECIAL NEED IF ANY

- English Language as Medium of instruction.



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