



*POSTGRADUATE PROSPECTUS*  
**2020-2021**



## **FORWARD BY THE DEAN**



The Graduate College was established in 2008. Ever since, the number of postgraduate degrees have reached 28 programmes. Twenty three of them are delivered by taught courses, including one DBA, 16 masters, 5 diplomas and one professional course. We offer programmes in Public and tropical Health, Nursing & Infectious Diseases and Family Medicine. In the Pharmacy discipline we offer 10 programmes, in Pharmacology, Pharmaceutical Chemistry, Pharmaceutical Technology, Other medical subjects and Pharmacy Practice.

programmes include medical Laboratory Sciences, Diagnostic Medical Imaging, Ultrasound in Obstetrics & Gynaecology, and Anesthesia. Faculty of Engineering offers a degree in Biomedical Engineering. In the humanities side, a master in Business Administration and one in Development Studies.

Furthermore, five diplomas are offered in Mass Communications, Infection Prevention and Control, HIV/AIDS, Medical Secretary, s and Research Methodology & Biostatistics. A Professional course is available in Non-Governmental Organization Administration (NGOs). Doctorate and Master programmes by research only, are offered in all disciplines in our University.

The purpose of this prospectus is to give relevant and important information about the Graduate College at

the University of Medical Sciences & Technology (UMST). It encompasses the academic and professional programmes to be organized and delivered at UMST. The prospectus gives the aspiring and enthusiastic students details of various programmes, curriculum, regulations of academic and personal conduct, as well as infrastructure, resources, facilities and clear objectives of each programme.

UMST established the Graduate College in 2008. It is set up for those wishing to gain a thorough and deep academic and professional knowledge in one or more aspects of medical, scientific and social sciences. Our vision and mission are also geared towards teaching the associated skills that are central to practice. These skills take many hours to acquire and are taught within our full time programmes and

within our short course programmes.

The environment and delivery of knowledge and skills offered at UMST present a clear and fantastic opportunity for people who desire to learn. We emphasize why social sciences, new technologies and scientific knowledge are important for how to solve problems in a professional context. Our delivery of competence and knowledge in any specific area is concomitant with a greater understanding of the offered subjects. This we consider an increasingly rare commodity. In UMST we are well suited to pursue such a goal.

UMST is renowned in Sudan as a higher education institution. It continues to support the development of new academic and professional initiatives. Our activities include introduction of new technologies

in postgraduate teaching, interactive and problem-based teaching. It is our conviction that research methodology, biostatistics and epidemiology are core to the success of any postgraduate programmes. Our programmes are approved by the Ministry of Higher Education & Scientific Research. Our Master degree in Pharmacology is approved by the American Educational Credential Evaluators. We are also affiliated with the National Ministry of Health, United Nations University in Malaysia, University of Science Malaysia.

The academic effort and excellence of UMST highly qualified staff is supplemented by visiting professors from top-of-the line institutions and corporate world.

I hope you will take the time to read and learn

more about our Graduate College and UMST in our website. Your suggestions will be highly appreciated. Changes can be made in the prospectus whenever necessary and students will be notified accordingly. It should be noted that the prospectus is not a legal document and hence not justifiable. Thank you for being our partner in helping to achieve our mission of preparing present-day and future global leaders.

Dr.Hanan Tahir  
Dean, Graduate College



## **Preface**

Welcome to Sudan's global university,  
The University of Medical Sciences and Technology  
(UMST).

UMST is renowned for having collaborative work  
with international institutions and postgraduate  
students from different parts of the world; especially  
Middle East, Africa and Asia





Algeria



Chad



Egypt



Ethiopia



Iraq



India



Nigeria



Syria



Jordan



Myanmar



Togo



USA



Yemen



Somalia



Palestine



Sweden



Djibouti



Uganda

We have an alumni community  
of 4556 members from more  
than 15 countries worldwide

## Teaching Facilities

Teaching takes place in the main campus and in hospitals affiliated to the university, which are: the Academy Charity Teaching Hospital, Yastabshiroon Medical Centre, Eltamyoz Emergency Centre and Alzaytoona Specialist Hospital. We also have a state-of-the-art, well furnished lecture theatres, with all modern amenities required for these days forward moving education process.

UMST adopts innovative and participatory approaches in the teaching of postgraduate students





## Study Facilities

To make the study period at UMST a success, we are committed to provide our students with state-of – the art lecture theatres,



libraries and advanced computing facilities

## Libraries

Our postgraduate students benefit from having access to well-equipped libraries with both printed and electronic books and journals. These are available in the library of main campus and all hospital affiliated to the university

## Computing Facilities

The university provides good computer facilities in the campus including E-library, Faculty of Computer Sciences



and Information Systems laboratories. Most examinations are computer-based and recently the university developed a Satellite System to link the main campus with all affiliated hospitals

## Research

### Opportunities

Being a research-oriented university, all UMST postgraduate students conduct research as partial fulfillment of their master programmes. Master and doctorate programmes can be offered by research only

UMST has collaboration with different international institutes in the Sudan, Africa, Asia, USA and Europe.

Our research philosophy entails that we produce graduates who are problem solvers and who have strategic thinking and are capable of affecting impacts on their work places



Meghan Bohren form USA who came in a research internship post at the Graduate College 2012-2013

Dr Tshinko B Ilunga from African Development Bank on a research mission to UMST

# Community Engagements

All Graduate College programmes, and in line with UMST's vision and mission, are truly committed to participate actively in any community activity where UMST have strength





# How to Apply and Register for Courses?

## 1. Admission:

### 1.1: Admission to Master program:

1.1.1 Applicants qualify for admission to Master programmes if they hold a bachelor degree from UMST or its equivalent.

**1.1.2 Interview:** - At Faculty and Programmes level applicants, shall be interviewed for assessment of their suitability, Knowledge and their reasonable command of English language

which will enable them to study in English.

### 1.1.3: Additional Requirements:

Faculties/Programmes may have additional requirements regarding admission to their programmes, such additional requirements shall be approved by the Graduate College (GC).

### 1.2: Application for Admission

1.2.1 Applications for admission to graduate studies shall be submitted to the (GC) admission officer

1.2.2 The admission officer after screening applications shall

distribute them to pertinent faculties/programmes.

1.2.3 At faculties and programme level applicants who are eligible for admission shall be recommended by the faculty graduate committee (FGC)/programme committee (PC) and applications shall be sent to Registrar of GC.

## 1.3: Registration:

1.3.1 A student shall be registered in graduate studies on the recommendation of FGC/PC and approval of the Dean of GC.

1.3.2 No student shall be allowed to enroll in more than one

programme of study at the same time in this University or for another programme in another University.

1.3.3 Each student is required to register for the whole duration of the programme.

1.3.4 No student is allowed to register unless he/she has paid the prescribed fees.



## **Post Graduate Programmes**

### **Master programmes offered by UMST :**

1. Advanced Ultrasound in Obse and Gyne
2. Biomedical Engineering
3. Business Administration
4. Development Studies
5. Diagnostic Medical Imaging
6. Electronic Engineering
7. Family Medicine
8. Infection Prevention and Control
9. Master of Science in Information System
10. Medical Laboratory Sciences
11. Nursing Sciences
12. Pharmaceutical Analysis and Quality Control Programme
13. Pharmaceutical Technology Programme

14. Pharmacology
15. Public and Tropical Health
16. Tropical Medicine and Infectious Diseases
17. Medical Diagnostic Ultrasound.
18. Masscommunication
19. Global MBA in Impact Entrepreneurship

### **Postgraduate Diplomas offered by UMST:**

1. HIV/ AIDS: Duration of the study: 6months
2. Epidemiology & Biostatistics: Duration of the study: 9months
3. Research Methodology: Duration of the study: 9months
4. Mass Communication: Duration of the study: 9month

5. Development Studies:

Duration of the study:  
9months

6. Infection Prevention & Control  
9months

7. Medical Security  
9months

### **UMST offers a Doctorate of**

### **Business Administration**

By Course & By Research :  
**and also offer PhD Programmes**

### **By Research :**

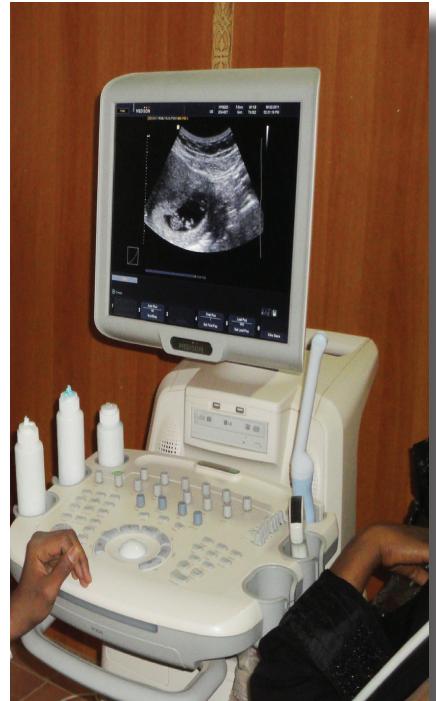
- Ph.D In Public & Tropical Health.
- Ph.D In Medical Physiology.
- Ph.D In Pharmacy.
- Ph.D In Medical Laboratory Sciences.

## 1- Master of Advanced Ultrasound in Obs & Gynae

**In collaboration with Ian  
Donald Inter-University  
School of Medical  
Ultrasound**

The program started on 01/2009/03/ as fellowship of advanced ultrasound in the field of obs & gyne . The fellowship program gained the approval of the higher council of scientific research to be master degree in 17th of Sep 2011.

The course consists of 18 months of training divided into 3 semesters. 2 semesters for



practical training and 1 semester for research. The candidates

who are legible for training are specialists of obs & gyne and technicians (sonographers) with B.sc degree.

There are 2 centers for training:

1. The Academy Charity Teaching Hospital (ACTH) – Khartoum.
2. Students living in the Gulf area are trained in (Dubai/ Abu Dhabi) UAE.

- Since beginning of the program on March 2009, the following batches has been graduated:

Place	Year	Batch	Number of Graduates
ACTH-Khartoum	2010-2009	1	9
ACTH-Khartoum	2011-2010	2	12
ACTH-Khartoum	2012-2011	3	7
Dubai-UAE	2010	1	5
Dubai-UAE	2011-2010	2	11

### **Students in training**

- 14 obs & gyne specialists in Khartoum centre (Batch 4).
- 6 technicians (radiographers) in Khartoum centre.

- 13 technicians (radiographers) Abu Dhabi- UAE.
- 21,200 ultrasounds examination were conducted in ACTH-Khartoum since the beginning of the program.

Sonography.

2. Knowing how to use and adjust and being oriented with images produced by transabdominal and transvaginal US.



### **Objectives of the program:**

To provide highly knowledgeable and well trained physicians and technologists in the field of obstetrical and gynecological Sonography.

1. To provide the graduate students with enough computational skills to meet the advance technology in

3. Performing complete US examination in all trimesters of pregnancy.

4. Identifying and differentiating between normal and abnormal gynecological US examination.



### **Ultrasound Trainers:**

1. Dr Nadia Hamid (Academic Charity Teaching Hospital)
2. Dr Eiman Saeed (Academic Charity Teaching Hospital)
3. Dr Nadia Alrayah (Academic Charity Teaching Hospital)



### **Visitors:**

1. Prof. Ristuko Pooh, Osaka- Japan
2. Prof. Hisham Mirghani, Al Ain- UAE
3. Prof. Sherif Abdelfatah, Bristol -UK
4. Prof. Mona Abo Alghar, Cairo- Egypt
5. Prof. Cihat Sen, Istanbul- Turkey
6. Prof. Juvani Monni, Italy
7. Prof. Anton Mikhaliow, Saint Petersburg- Russia

Prof. Ritsuko Pooh with Batch (2), Khartoum- Jan 2011

Prof Hisham Mirghani with Batch (1), Khartoum- July 2009

Prof Cihat Sen with Batch (1), Khartoum- Dec 2009

Prof Mona Abou Alghar with Batch (3), Khartoum- Jan 2012



### Local & International Conferences:

The training program includes daily hands on training under supervision of senior trainers at ACTH- Khartoum and regular monthly lectures by international expert lecturers from all over the world.

The program includes attending two conferences per year, one national and the other international.

Batch 1 students attended international conference in Dubrovnik- Croatia in Oct 2009, Batch 2 students attended



international conference in Barcelona- Spain in Sep 2010, Batch 3 students and Batch 4 students attended 2 conferences in Cairo and Alexandria – Egypt in 2011and 2012 respectively.

The Program involves attending and participating in national conferences. Three local conferences have been held in 2009, 2010, and 2011 at university of medical sciences & technology (UMST).

Batch 1 & 2 attending an International Conference in Barcelona- Spain, Sep 2010

### **Testimonies**

“Undoubtedly UMST is one of the outstanding institution in Sudan ,particularly in the area of ultrasound and OBGYN. I feel



fortunate to be here and to be taught by the best scholars and professors. UMST has the latest equipments and technologies for teaching and demonstration”

Ousmano Beshir Hassaballah  
from Chad

### **CONTACTS:**

Dr.Helmi Nour, MRCOG  
Department of Obstetrics and Gynecology, UMST  
Academy Charity Teaching Hospital  
E-mail: [helminour@yahoo.com](mailto:helminour@yahoo.com)

## 2-M Sc Programme in Biomedical Engineering (BME)

### Why Study with us:

Biomedical Engineering (BME) is an exciting and growing field which resides at the interfaces between engineering, medicine and science. The broad goal of BME is to solve human healthcare problems through advances in diagnosis, treatment and prevention of human diseases. The Master of Science in Biomedical Engineering will educate post-graduate engineering careers in medical devices and diagnostic industry. Its clients are a mix of capable young and adults who seek an advanced

professional education that will prepare them for leadership roles in product development, research and consultancy in this promising field.

### **Entry requirements:**

#### 1. Admission:

1.1 Admission to Master program: In order to be eligible for admission to this programme, a candidate must at least have one of the following qualifications.

1.1.1: Ist or 2nd class B.Sc. Honours Degree in Biomedical Engineering or equivalent internationally recognized qualifications usually in engineering and other appropriate science and technology subject areas. Other qualifications and relevant experiences will be assessed on an individual basis.

TOEFL score of 220 (Computer based) 550 (paper based).

#### 1.1.2: Additional Requirements:

1.1.2.1 Candidates holding B.Sc honours degree or post graduate diploma in biomedical engineering can be offered an unconditional acceptance.

1.1.2.2 Candidates with non- biomedical engineering honours degrees can be offered a conditional acceptance with conditions provided they satisfy pre-requisite courses.

1.1.2.3 A candidate having a B.Sc. (Third Class) in any of the above mentioned disciplines and at least one year working experience in the field of specialization is eligible for this program.

## **English Language**

### **Requirements:**

Applicants shall provide evidence of good command of English for writing, speaking, listening understanding and reading.

A student shall possess one of the following English qualifications as minimum:

UMST English Qualification Examination.

An IELTS score of 5.5 minimum

### **Taught Courses:**

The Faculty of engineering designs a curriculum especially for this program with reference to corresponding international universities. The design of the program takes full advantage of the environment offered at the University of Medical Sciences and Technology as one of the leading

universities in Sudan. The topics cover in detail the main areas of research and development.

### **Research Opportunities:**

As a partial fulfillment of the M.S.c degree awards the student should submit a thesis. The FGC/PC on the recommendation of the coordinator of the program shall assign an academic advisor to each student. Most of the research facilities are available in the faculty in addition to Ystabshiroon, Alzitona and Academy Hospitals.

### **Careers:**

The Master of Science program in Biomedical Engineering is an interdisciplinary course of studies, which should provide students

with scientific knowledge, skills and methods in the field of biomedical engineering, leading to a scientific qualification and autonomy in the field, our graduates are very popular for all medical engineering companies, ministry of health and teaching staff in different academic insinuations running similar programme

### **Testimonies:**

To be added

### **Contacts:**

Dr.Dalia Mahmoud

Mobile: +249909821371

E-mail:

[d.daliyahoud@yahoo.com"](mailto:d.daliyahoud@yahoo.com)

## 3-Master of Business Administration (MBA)

### Why study with us?

Our MBA program can change your carrier. It brings together graduates of social sciences and other discipline from a variety of professional areas in the private and public sectors. It provides an opportunity for participants to extend their knowledge and share their work experiences by working with colleagues from diverse fields of specialization.

The programme is, analytically oriented, combining lectures, class discussions, case

studies, individual and group assignments and presentations and development of research skills. Links with the business community, industry and other business institutions are an important part of our MBA programme.



## **The MBA programme offers the degree in seven specializations:**

- MBA ( Hospital Management )
- MBA ( Total quality Management )
- MBA(Telecommunications Management )
- MBA ( Human Resources Management )
- MBA ( Marketing Management )
- MBA ( Project Management )
- MBA ( Finance)

## **Entry Requirements**

Applicants qualify for admission if they hold a bachelor's degree with at least a " good " grade from UMST or an equivalent degree from another recognized university.

An applicant may qualify for admission if he/she holds a bachelor's degree in any

specialization with " pass " grade from UMST or an equivalent degree from a recognized university plus three years work experience.

Business Administration graduate with appropriate qualifications can join the programme at the 2nd semester.

**English Language Requirements**  
 Applicants shall provide evidence of good command of the English Language. An Applicant's shall satisfy one of the following English Language qualifications:  
 Pass UMST English Qualification test.

An IELTS score of 5 minimum.  
 TOEFL score 200(computer based), 500 (paper based).

## **Taught Courses:**

### **Foundation Courses (Semester1)**

Code	Subject	.C.H
MBA 601	& Management Organization Theory	3
MBA 602	Principles of Accounting	3
MBA 603	Business Economics	3
MBA 604	Marketing Management	3
MBA 605	Business Statistics	3
		15

### **Core Courses (1) (Semester2)**

Code	Subject	C.H
MBA 701	Human Resource Management	3
MBA 702	Entrepreneurship& Small Business Management	3
MBA 703	Financial Management	3

MBA 704	Management Accounting	3
MBA 705	Business Research Methods	3
		15

### Core Courses (2) (Semester3)

Code	Subject	C.H
MBA 801	Organizational Behavior	3
MBA 802	Management Information Systems	3
MBA 803	Managerial Economics	3
MBA 804	Operations Management	3
MBA 805	Total quality Management	3
		15

### Specialized Courses (Semester4)

### Hospital Management (1) Specialization

Code	Subject	C.H
MBAH 900	Strategic Management	3
MBAH 901	Hospital Management	3
MBAH 902	Medical Ethics	3
MBAH 903	TQM in Health Care	3
MBAH 904	Advanced Topics in Health Care	3
		15

### TQM Specialization -(2)

Code	Subject	C.H
MBAH 900	Strategic Management	3
MBAH 901	TQM in Specialized institutions	3
MBAH 902	Quality Control	3
MBAH 903	Supply chain Management	3
MBAH 904	Advanced Topics in TQM	3
		15

**Telecommunications -(3)  
Management**

Code	Subject	C.H
MBAH 900	Strategic Management	3
MBAH 901	Telecommunications Management	3
MBAH 902	Marketing in Telecommunications	3
MBAH 903	Regulatory and legal Issues in Telecommunications Management	3
MBAH 904	Advanced Topics in Telecommunications	3
		15

**(4)-Human Resources Management**

Code	Subject	C.H
MBAH 900	Strategic Management	3
MBAH 901	Human Resources Development	3
MBAH 902	Sudanese Employment law	3
MBAH 903	Strategic Human Resources Development	3
MBAH 904	Advanced Topics in Human Resources Management	3
		15

**Marketing Specialization -(5)**

Code	Subject	C.H
MBAH 900	Strategic Management	3
MBAH 901	Services Marketing	3
MBAH 902	Strategic Marketing	3
MBAH 903	Consumer Behaviour	3
MBAH 904	Advanced Topics in Marketing	3
		15

## (6)- Project Management Specialization

Code	Subject	C.H
MBAH 900	Strategic Management	3
MBAH 901	Project Management	3
MBAH 902	Communications Conflict	3
MBAH 903	Project Risk Management	3
MBAH 904	Advanced Topics in Project Management	3
		15

## Finance Specialization - (7)

Code	Subject	C.H
MBAH 900	Strategic Management	3
MBAH 901	Corporate Finance	3
MBAH 902	Financial Institutions	3
MBAH 903	Financial Reporting	3
MBAH 904	Advanced Topics in Finance	3
		15

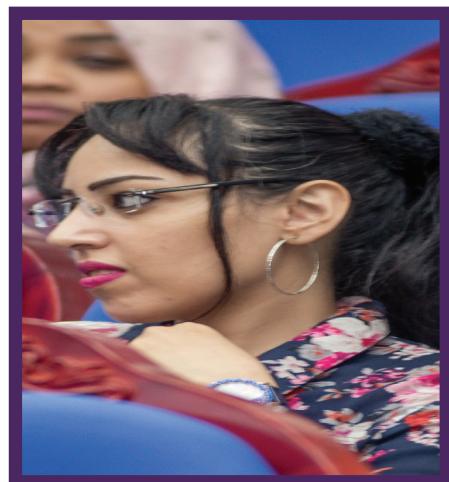
## Testimonies

“Education is one thing no one can take away from you.

The best thing about UMST is definitely the congenial and friendly academic environment.

I came all the way from India to study MBA at UMST. I choose this university because my mother used to tell this it is the best in Sudan. Thank God that I got admission here”.

Merin Mariam Chacko from India



## Careers

The MBA programme at UMST stands out from the crowd. Our over 1000 graduates work in most well-managed companies at home and abroad. Even well known companies (e.g. Zain, Ram) sponsor their employees to join our programme. We believe our programme at UMST is 2nd to none in the country.

## Contacts:

Dr. Abdel Radi O. Miro  
E-Mail:[mba.registrar@yahoo.com](mailto:mba.registrar@yahoo.com).  
Tel: 0183224496



## 4-Master Programme in Development Studies

### Why study with us?

The Master Programme in Development Studies is designed with a view to generate, mobilize and share knowledge that transforms developing economies into developed ones where poverty is minimized and social justice is commonplace. The Programme trains students in the different facets of development studies and emphasizes endowing society with comprehensive visionary development specialists with the competence imperative for

furthering the causes of sustainable socio-economic development and environmental justice. The Programme forms an important component of UMST's arsenal deployed to realize its vision of promoting life-long learning through innovative education and professional development and for extending its influence both locally and internationally.

The Programme offers master degrees in 6 specializations, viz.: Development Economics; Leadership; Environmental Planning and Policy; Urban Planning; Health and Society; Health Economics and Policy.

### Entry Requirements:

- Applicants qualify for admission if they hold honours degrees in any social science discipline from UMST or any recognized university.
- Applicants who hold honours degrees in a natural science discipline with sufficient background in social sciences may be considered.
- An applicant may qualify for admission if he/she holds a general bachelor degree in any social science from UMST or any other recognized university, plus two years working experience in public or private institutions.

## **Programme**

### **Course Structure:**

<b>Subjects code</b>	<b>Semester 1</b>
SME613	Microeconomics
SED613	Economic Development
SSD613	Social Development: Analysis and Policy
SRM613	Research Methodology
SGD613	Governance and Development
SPD613	Poverty and Development

<b>Subjects code</b>	<b>Semester 2</b>
SMC623	Macroeconomics
SED623	Environment and Development
SGI623	Global Institution, Trade Rules and Development
SCA623	Computer Applications for Social Sciences
SUD623	Urban Development Planning
SDS623	Local Development Strategies

<b>Subjects code</b>	<b>Semester 3/Development Economics Specialization</b>
SAM634	Advanced Macroeconomics
SMA634	Advanced Microeconomics
SMI634	Econometrics
SGD634	Growth and Development
SCI634	Current Issues in Development Economics (Research Paper)

<b>Subjects code</b>	<b>Semester 3/ Environmental Planning and Policy Specialization</b>
SPA634	Policy Analysis for Environmental Issues
SEP634	Environmental Planning and Protection
SEE634	Environmental Economics
SHE634	Health and Environment
SEI634	Current Issues in Environmental Planning and Policy (Research Paper)

<b>Subjects code</b>	<b>Semester 3/Leadership Specialization</b>
SDL634	Developing Leadership
SLE634	Leadership and Events
SPM634	Project Management
SSM634	Strategic Management
SIL634	Current Issues in Leadership (Research Paper)

<b>Subjects code</b>	<b>Semester 3/Urban Planning Specialization</b>
SSS634	Strategic Spatial Planning
SLD634	Land and Development Processes
SNP634	Neighbourhood Planning
SPE634	Planning for urban Change
SUP634	Current Issues in Urban Planning (Research Paper)

<b>Subjects code</b>	<b>Semester 3/ Health and Society Specialization</b>
SHE634	Issues of Health Environments and Society
SHS634	Health Systems in the Global Society
SEH634	Environmental Health
SHI634	Health and Illness in Cross-Cultural Perspective
SHS634	Current Issues in Health and Society (Research Paper)

## **Career Opportunities**

The Master Programme in Development Studies is carefully designed to equip students with problem-solving skills and state-of-the-art knowledge in development studies. It is also intended to meet modern educational needs and employment requirements. Graduates of the Programme are expected to be highly competitive with respect to jobs in the academia, the government and business sectors, consulting and international development organizations.

## **Contacts**

Dr. Mohamed Ahmed Mukhtar  
Email:ma54409@gmail.com  
Tel: +249-155-150 - 177

<b>Subjects code</b>	<b>Semester 3/Health Economics and Policy Specialization</b>
SHE634	Health Economics
SHP634	Global Health Policy
SGS634	Health Systems in the Global Society
SHF634	Health Care Financing
SCH634	Current Issues in Health Economics (Research Paper)



## 5. M.Sc. In Medical Diagnostic Ultrasound

### Why study with us?

In regards to the growing demand of specialized radiological technicians locally and regionally, the UMST has launched a Master in Medical Diagnostic Ultrasound by courses and thesis in 2019 focusing on general Ultrasound including Obstetric, Gynecology, Echocardiography, Abdomen, Small parts, Musculoskeletal, Emergency and Doppler ultrasound to provide highly knowledgeable and well trained students in the fields of Sonography, and to provide the graduate student with enough computational skills to meet the cutting edge technology in radiology.

### Entry requirements:

In order to be eligible for admission to this programme, a candidate must

at least have one of the following qualifications: 1st or 2nd class B.Sc Honors Degree in Radiological Sciences. Other qualifications and relevant experiences will be assessed on an individual basis. A candidate having B.Sc 3rd class Honors Degree in Radiological Sciences should have a Qualifying course.

### English language requirements:

Applicants shall be interviewed for assessment of their suitability, knowledge and their reasonable command of English language which will enable them to study in English.

### Taught Courses:

Attached.

### Careers:

Sonographers who are master degree holders have a lot of future career opportunities in the private sector, as teaching staff in different academic institutions both locally

and regionally.

### Contacts:

Ms. Huda Suliman Helmi Abdeen Hussein.  
E.mail: [hudahelmi95@gmail.com](mailto:hudahelmi95@gmail.com).  
Tel: +249927252805.

### The Curriculum

The Faculty of Radiological Sciences has designed a curriculum especially for this MS.c in medical diagnostic ultrasound with reference to corresponding international universities. The design of the program takes full advantage of the environment offered by the University of Medical Sciences and Technology as one of the leading universities in Sudan.

The topics cover in detail the main areas of research and development. As a prerequisite for the MS.c degree awards, the student should submit a thesis.

## **The Course Structure**

### **First Semester:**

Course Code & No	Course Title	Hours / Week		CH	Exam Hours
		Theory	Practical		
BS 611	Advanced Applied Human Anatomy	2	2	3	3
BS 612	Advanced Applied Human Physiology	2	2	3	3
BS 613	Advanced Applied Human Pathology	2	2	3	3
USG 614	Ultrasound Physics & Instrumentation	2	0	2	3
USG 615	Ethics and Counseling	2	0	2	3
	Total			13	

### **Second Semester:**

Course Code & No	Course Title	Hours / Week		CH	Exam Hours
		Theory	Practical		
USG 621	Gynecological Ultrasound	2	2	3	3
USG 622	Obstetrical Ultrasound	2	2	3	3
USG 623	Small Parts Ultrasound	2	2	3	3
USG 624	Clinical Practice I	0	8	1	3
	Total			10	

## **Third Semester:**

Course Code & No	Course Title	Hours / Week		CH	Exam Hours
		Theory	Practical		
USG 631	Abdominal Ultrasound	2	2	3	3
USG 632	Doppler Ultrasound	2	2	3	3
USG 633	Echocardiography	2	2	3	2
USG 634	Clinical Practice II	0	8	1	3
USG 635	Research Methodology & Biostatistics	2	0	2	2
	Total			12	

## **Fourth Semester:**

Course Code & No	Course Title	Hours / Week		CH	Exam Hours
		Theory	Practical		
USG 641	Musculoskeletal Ultrasound	2	2	3	3
USG 642	Emergency Ultrasound	2	2	3	3
USG 643	Clinical Practice III	0	8	1	3
USG 644	Thesis	0	12	6	3
	Total			13	

## 6. Master in Diagnostic Medical Imaging

### Why study with us

In regards to the growing demand of specialized radiological technicians locally and regionally, the UMST has launched a Master in Diagnostic Medical Imaging by course and thesis in 2013, focusing on Ultrasound, Computed zTomography, Magnetic Resonance Imaging, with highlights in interventional radiological techniques.

### Entry requirements

In order to be eligible for admission to the program, a candidate must at least have one of the following qualifications:

1st or 2nd class B.Sc Honors Degree in Radiological Sciences. Other qualifications and relevant experiences will be assessed on an individual basis.

A candidate having a B.Sc 3rd class Honors Degree in Radiological Sciences should have at least two years working experience including the National Military Service.

### English language requirements

Applicants shall be interviewed for assessment of their suitability, knowledge and their reasonable command of English language which will enable them to study in English.

### Taught Courses

Attached.

### Careers

Radiological technicians who are master degree holders have a lot of future career opportunities in the private sector, as teaching staff in different academic institutions both locally and regionally.

### Contacts

Mr.Mohamed Hussein  
Email:mohammedlaser@gmail.com  
Tel. +249 912553708  
Ext. 299 - 237

## The Course Structure

### First Semester:

#### *Course Code & No*

#### *Course Title Hours /*

#### *Week CH Exam Hours*

#### *Theory Clinical*

#### **Practice RAD 711**

Anatomy and Cross Section Anatomy	2	1	2	3	
RAD 712	Advanced Human Physiology	3	-	3	3
RAD 713	Applied Pathology	3	-	3	3
RAD 714	Research Methodology & Biostatistics	2	-	2	3
	Total			11	

### Second Semester:

#### *Course Code&No*

#### *Course Title Hours /*

#### *Week CH Exam Hours*

#### *Theory Clinical*

#### **Practice RAD 725**

CT physics & Instrumentation	3	2	4	3	
RAD 726	MRI physics & Instrumentation	3	2	4	3
RAD 727	Computer application in medical imaging	2	2	3	3
RAD 728	Ultrasound Physics& Instrumentation	3	2	4	3
RAD 729	Radiographic Pathology	2	-	3	3
	Total			18	

### **Course Code & No**

#### *Course Title Hours /*

#### *Week CH Exam Hours*

#### *Theory Clinical*

#### **Practice RAD 7310**

CT Technique	2	1	3	3	
RAD 7311	MRI Technique	2	1	3	3
RAD 7312	Nuclear Medicine Physics & Technique	2	1	3	3
RAD 728	CT & MRI clinical practice (1)	-	6	6	3
RAD 729	U/S Technique & Clinical practice	2	1	3	3
	Total			18	

**Third Semester:**

**Fourth Semester:**

**Course Code & No**

**Course Title Hours /**

**Week CH Exam Hours**

**Theory Clinical**

**Practice RAD 7415**

Quality Management	2	-	2	3	
RAD 7416	Interventional Radiology	2	1	3	3
RAD 7417	CT & MRI clinical practice (2)	-	6	6	3
RAD 718	Thesis	-	-	6	-
	Total			17	



**Duration of course study:**

(24) Months ---- (4) semesters

Each semester last about 15 weeks

## 7- MSc in Electronic Engineering

### Why study with us:

The Master of Science program in Electronic Engineering is an interdisciplinary course of studies, which should provide students with scientific knowledge, skills and methods in the field of Electronic Engineering, leading to a scientific qualification and autonomy in the field of Electronic Engineering. And undertake responsible and challenging posts in academia and industry.

### Entry requirement:

In order to be eligible for admission to this programme, a candidate must at least have one of the following qualifications

1. A 2nd class B.Sc. Honors Degree in Electronic (Communication or control) Engineering or equivalent internationally recognized qualifications usually in engineering and other appropriate science and technology subject areas. Other qualifications and relevant experiences will be assessed on an individual basis.

### English Language Requirement:

Applicants shall provide evidence of good command of English for writing, speaking, listening understanding and reading. A student shall possess one of the following English qualifications as minimum: UMST English Qualification Examination. An IELTS score of 5.5 minimum TOEFL score of 220 (Computer

based) 550 (paper based).

A candidate having a B.Sc. (Third Class) in any of the above mentioned disciplines and at least one year working experience in the field of specialization is eligible for this program.

### Taught Courses:

The Faculty of engineering designs a curriculum especially for this program with reference to corresponding international universities. The design of the program takes full advantage of the environment offered at the University of Medical Sciences and Technology as one of the leading universities in Sudan.

The topics, cover in detail the main areas of research and development. As a partial fulfillment of the M.Sc. degree awards the student

and the design and conduct of experiments through practical experience in the laboratory, The capability to display initiative and innovation, demonstrated in a major item of individual work, the skill to work collaboratively with others through the development of team skills; apply advanced techniques to problems at the frontiers of knowledge, A range of professional and management skills, deep knowledge and advanced understanding in specialist areas, An awareness of research methodology.



should submit a thesis.

**Research opportunities:**  
the students will have developed, and ability to gather, organize and critically evaluate information needed to formulate and solve problems, also to apply acquired knowledge effectively and efficiently to all work in the relevant areas of Engineering, Skills in qualitative and quantitative oral and written communications designed to present essential scientific and technical concepts, Skills in observation, measurement



### **Contact :**

Dr. Atif Osman Bakheit  
Telephone: 0117000082  
Email:  
[atifbakheit@gmail.com](mailto:atifbakheit@gmail.com)

## 8. MSc in Family Medicine

### **Why Study with us**

Family medicine is an ever evolving specialty. There is a great demand for family medicine practitioners worldwide. The main obstacle for the development of Family medicine in the developing countries is the scarcity of trained family medicine practitioners and trainer/ mentors in the field. Great efforts and resources are needed to develop Family medicine practice in Sudan.

Sudan recognized the importance of establishing a sound training program in FM for many years. Since then many initiatives have been launched in this regard including establishment of local postgraduate training program

in the field of FM. This master degree is part of this effort to enhance and accelerate the development of family medicine. Therefore most of its regulations and syllabus are driven directly from the Sudanese Board of Family Medicine Specialty so that the candidates can be easily enrolled if they decided to obtain the Board qualification, because most of its curriculum will be covered during this course.

### **Entry Requirements**

In order to be eligible for admission to this programme a student shall hold a bachelor degree in Medicine from UMST or other recognized university, and successfully completed his/her internship (Houseman ship). Applicants shall also be registered with Sudan Medical Council

### **Course structure**

#### ***Semester 1:***

- Fundamentals of Family Medicine (5 Months).
- (This Rotation will also include: Epidemiology, Research Methodology & Biostatistics, Medical Ethics professionalism , research and thesis Preparation)
- Primary Health Care (PHC) (1 Month)

#### ***Semester 2:***

- Internal Medicine. (3 Months).
- ENT (1 Month).
- Diagnostic Imaging & Laboratory Science (1Month).
- Psychiatry (1Month).

#### ***Semester 3:***

- Pediatrics (3 Months)
- Obstetrics & Gynecology (3 Months).

**Semester 4:**

- Dermatology(1 Month).
- Surgery& Orthopedics (3 Months).
- Emergency Medicine (1 Month).
- Ophthalmology(1 Month).
- The Submission of Research will be at the end of 4 Semester

**Career Opportunities**

Graduate of our MSc Family Medicine are highly employable in Sudan, the Gulf and KSA

**Contacts:**

Dr Hanan Tahir



## 9- MSc in Infection Prevention and Control

### Why study with us

This innovative postgraduate course in Infection Prevention and Control has been designed to help you deal safely and effectively with infection risks. You will develop your confidence and expertise in the management and implementation of infection control change.

### Admission Requirements

Applications will normally be received from those who hold one of the following qualifications:  
A medical degree  
BSc degree in Medicine, Dentistry, Nursing, Pharmacy

Applications may also be received from individuals with a minimum of three years of relevant healthcare experience and suitable qualifications. Applicants meeting these requirements may be required to attend for interview.

### English Language

#### Requirements

At Faculty and programmes level, applicants shall be interviewed for assessment of their suitability, knowledge and their reasonable command of English language which will enable them to study in English

### Taught Courses/

#### Semester: 1

Module 1: Introduction

4 CRD H

Module 2: Microbiology

4 CRD H

Module 3: Antimicrobial Stewardship

1 CRD H

Module 4: Basic Epidemiology & Methods of Surveillance

2 Cred H

Module 5: Cleaning, Disinfection, and Sterilization

4 Cred H  
of Medical Equipment and Devices

#### Semester: 2

Module 6: Hand Hygiene.

2 CRH H

Module 7: Routine Practices and Additional Precautions

2 CH

Module 8: IC Precautions for Selected Situations (Isolation policy)

1 CH

Module 9: Ambulatory Infection Prevention Course

2 CH

Module 10: Outbreak Management

2 CH

Module 11: Occupational Health  
2 Cred H

### **Semester: 3**

Module 12: Environmental Management

1 Cred H

Module 13: Food & Kitchen  
1 Cred H

Module 14: Waste Management

1 Cred H

Module 15: Construction &  
Renovation

1 Cred H

### **Research opportunities**

Students attending the master programme are required to independently design and undertake a research project, resulting in a thesis, to complete the program requirements—(define a research problem, carry out his thesis research), within the course

designated timeframe.

Students have to defend their thesis before an examination board. The work will often encompass the application of techniques acquired during the training, but a critical review of the literature on a selected topic or a strategic report on infection prevention and control issue might equally be acceptable. Participants are encouraged to

work for their thesis project on data, obtained from a particular situation in hospitals.

### **Contacts:**

Dr. Mohamed Alfatih Sanhouri

Tel: +249-183-223429

Email:

[mohdsanhori79@gmail.com](mailto:mohdsanhori79@gmail.com)



## 10. Master of Science in Information System

### Why Study with us

Given today's fast growing application of computer techniques, organizations of different types have a crucial demand for graduates with master degree in Information Systems. Successful new technology products and information systems always combine technical quality and smart performance to achieve strategy objectives. Developing these systems requires extensive communications among technical developers, different partners and users.

The program covers a range of topics and skills that are required in today's computing intensive world. Information technology has become a core facet and determining factor of success in every imaginable specialism available these include and are not limited to businesses, medicine, and geographical industries.

The Master of Science in Information Systems program focuses on training students in the core concepts and practicalities of computing, and in other areas of related sciences including management, and scientific disciplines so graduates can develop successful careers in

management, medical, and geographical positions that require deep technical skills.

The Master Degree is aimed at utilizing Computer Science in Business, Geographical and Medical fields. Therefore, the program offers the following three areas of specialization:

- Business Information Systems (BIS)
- Health and Medical Informatics (HMI)
- Geographic Information Systems and Remote Sensing (GIS)

A student graduating with the MSc in Information System program will be able to:

- Identify, formulate, and solve

advanced information system problems through the application of advanced knowledge of information system.

- Acquire knowledge of contemporary issues and demonstrate an advanced level of understanding in the field of information system.
- Design and conduct experiments, as well as analyze, interpret data and make decisions.
- Conduct research in a chosen area of specialization, document and defend the research results.
- Use techniques and modern tools necessary for information system practice.
- Function on teams and

communicate effectively.

- Understand professional and ethical responsibilities.

### Career opportunities

The MSc in Information system program is mainly targeted to meet the workforce need of Information system professionals in the country and the region. The Program offers strong employment and career development prospects for graduates in the aforementioned areas and many others. The skills developed in graduates are particularly attractive to entities where information system is crucial such as:

### Business Information Systems (BIS)

The program combines the fundamental content of both Computer Science and Business Management to prepare graduates to combine business enterprise with a computing expertise.

The program is designed for students seeking to acquire a high level of knowledge of business concepts and information systems applications to create solutions for contemporary business problems. The student will acquire the skills needed to integrate hardware, software, and management capacities to solve problems in specific functional areas of business.

## **Health and Medical Informatics (HMI)**

Health and medical informatics is the application of principles of computer and information science to the effective organization, analysis, management, and use of information in health care.

With evolving health care reform, the development, implementation, evaluation, and management of information technology solutions are critical, and core technologies and standards must be addressed.

The Health and Medical Informatics program addresses the growing need for professionals who need to possess both analytical skills and business acumen with

the goal of improving health care delivery systems through information technology.

## **Geographic Information Systems and Remote Sensing (GIS)**

The Geographical Information System and Remote Sensing (GIS) have become key technology tools for the collection, storage and analysis of spatially referenced data. Industries that utilize these spatial technologies include agriculture, forestry, mining, market research, environmental analysis as well as the social and medical sciences.

The Geographical Information

System and Remote Sensing program provides the high-quality education needed to meet the needs of users of geotechnology.



Students will gain a high level of competency in the principles

of GI science and the use of geotechnology; they will be able to routinely use professional software for data acquisition, handling, exploration and mapping.

## Entry Requirements

Graduates in all disciplines can be considered according to the following conditions:

Applicant holding an honor university degree or a general degree with more than (150) credit hours in information system or information technology or computer science or related disciplines may receive unconditional acceptance to the program.

Applicant holding a general university degree with less than (150) credit hours in information system or information technology or computer science or related disciplines with experience work more than two years may accepted to the program.

Applicant holding a university degree in none information system or Computer Science & or IT Related disciplines, may be accepted to the program upon finishing a Higher Diploma degree in Information System or related field.



## Taught Course

### Curriculum of Master of Science in Information System (Business Information Systems)

#### Semester One:

Code	Subject Name	CH (14)
MIS 101	Intelligent systems	3(3,0)
MIS 102	Knowledge Engineering	3(3,0)
MIS 103	Data Warehousing Mining	3(2,2)
MIS 104	Information System Applications Design and Development	3 (2,2)
MIS 105	Information System Strategy	2(2,0)

#### Semester Two:

Code	Subject Name	CH (14)
MIS 206	Information System Quality Management	2(2,0)
BIS201	Business Analysis Information Systems	3(3,0)
MIS 308	Research Methodology	2(2,0)
BIS 203	Generating Business Value from Information Technology	3 (2,0)

#### Semester Three:

Code	Subject Name	CH (8)
BIS 202	E-Business Applications and modeling	3(2,0)
MIS 309	Thesis	6(0,6)

### Curriculum of Master of Science in Information System (Health and Medical Informatics)

#### Semester One:

Code	Subject Name	CH (14)
MIS 101	Intelligent systems	3(3,0)
MIS 102	Knowledge Engineering	3(3,0)
MIS 103	Data Warehousing Mining	3(2,2)
MIS 104	Information System Applications Design and Development	3 (2,2)
MIS 105	Information System Strategy	2(2,0)

**Semester Two:**

Code	Subject Name	CH (14)
MIS 206	Information System Quality Management	2(2,0)
HIS 201	Health Data and Electronic Health Records	3(2,2)
MIS 308	Research Methodology	2(2,0)
HIS 203	Emerging Technologies in Health/Medical Informatics	3(2,2)
MIS 104	Computer Aided Decision Support System	3(2,2)

**Semester Three:**

Code	Subject Name	CH (8)
HIS 202	E-Business Applications and modeling	3(2,2)
MIS 309	Thesis	6(0,6)

## Curriculum of Master of Science in Information System (Geographic Information Systems and Remote Sensing)

**Semester One:**

Code	Subject Name	CH (14)
MIS 101	Intelligent systems	3(3,0)
MIS 102	Knowledge Engineering	3(3,0)
MIS 103	Data Warehousing Mining	3(2,2)
MIS 104	Information System Applications Design and Development	
MIS 105	Information System Strategy	2(2,0)

**Semester Two:**

Code	Subject Name	CH (14)
MIS 206	Information System Quality Management	2(2,0)
MIS 104	Computer Aided Decision Support System	3 (2,0)
MIS 308	Research Methodology	2(2,0)
GIS 202	Cartography and Data Visualization	3(2,2)
GIS 203	Integrated GIS/ Remote Sensing	3(2,2)

**Semester Three:**

Code	Subject Name	CH (8)
GIS 201	GIS Applications and Technologies	3(2,2)
MIS 309	Thesis	6(0,6)

## Research opportunities

The faculty of computer sciences and information technology has taken great care to encourage the development of scientific research and support students to do original and innovative research, which contribute to the enrichment of scientific research of the university and the community, which in turn contributes to the support of the overall national development.

The following are samples of scientific researches in the field of business information systems and geographic information systems:

## BIS:

No	Name	Research title	supervisor	External examiner
1	Ayman Mustafa Abbasher	Finding the barriers for Knowledge sharing in organizations	.Dr G.K.Viju	Dr Ahmeddean Abdlla Moraweh
2	Alaa Adel Osman Hassan	A Scientific Approach of Obtaining Business Decisions From Market Intelligence Systems	.Dr G.K.Viju	Dr Ahmeddean Abdlla Moraweh
3	Ali Faisal Ishag Alhashmi	An Intelligent System for Customer Service: A Text Stream Mining Approach	.Dr G.K.Viju	Prof.Izzeldin Mohamed Osman
4	Ali Mutasim Ahmed Farag	Big Data Analytics In Health Care:Support Malaria Elimination in Sudan by 2030 by Using Data Mining Tools and Techniques	Dr.Mohammed Izzelddeen	Dr.G.K.Viju
5	Ahmed Abdalaziz Alzubair	Global challenges of e-banking	Dr.G.K.Viju	Dr.Ahmeddean Abdlla Moraweh
6	Hadeel Hussein SeifEldein	Sentiment analysis and opinion mining on Twitter	Dr. Mohammed Izzelddeen	Dr.G.K.Viju
7	Mohammed Ibrahim Malik	Mapping the digital divide Sudan	Dr.G.K.Viju	Dr.Ahmeddean Abdlla Moraweh

8	Walid Dafalla Ahmed	The Effect of Health on improving in Prevention of Mother to Child Transmission of HIV/AIDS Program	Dr. Mohammed Izzelddeen	Dr Ahmeddean Abdlla Moraweh
9	Yusra Yahia Hussien	Using text mining to Improve Customer Support Services	Dr. Mohammed Izzelddeen	Prof. Izzeldin Mohamed Osman
10	Mustafa Nabeel Mustafa	Product differentiation & market segmentation	Dr. Yusuf Kani	Prof. Izzeldin Mohamed Osman
11	Maram Mustafa Omer	Social Network Sentiment Analysis to Improve Branding and Customer Loyalty	Dr. Mohammed Izzelddeen	Dr.G.K.Viju
12	Weam Abdulrahma	Success factors of ERP information system	Dr.G.K.Viju	Dr.Ahmeddean Abdlla Moraweh
13	Tasneem AbdAllah Elamin	Opinion mining for comment sentiment analysis on Amazon.com	Dr. Mohammed Izzelddeen	Prof. Izzeldin Mohamed Osman
14	Dalal AbdElrhman	Mobile Money transfer Technology: A Way for Financial Inclusion in Sudan	Dr. Yusuf Kani	Dr.G.K.Viju

## GIS:

No	Name	Research title	supervisor	External examiner
1	Shaima Elfatih Abbas	Spatial Distribution and Monitoring Research inUMST	Dr.Munikal Noma	Dr.Eltayeb Gnawa
2	Abuoaf Abdallah Abuoaf	Flood Monitoring Mapping &Control a perspective analysis Remote Sensing Data	Dr.Nizar Hammam	Dr.Eltayeb Gnawa
3	Ahmed Moham -med Shibrain	Spatio- Temporal data driven discovery cognitive automation	Dr.Mohamm edlzzeldeen	Dr.G.K. Viju
4	Khadar Dahir Abdisalam	Utilization of GIS Technology in customer relationship management inbanks: A case in Sudanese competitive market	Dr.Munikal Noma	Dr.Eltayeb Gnawa
5	Ayat Mustafa Ahmed Adam	Governmental Schools' spatial using Geographical Information Systems in Umdurman Locality	Dr.Munikal Noma	Dr.Eltayeb Gnawa



## Coordinator

Dr. Nazar Hamam

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# 11-MSc in Medical Laboratory Sciences

## WHY STUDY WITH US

This is a full-time program that enables professionals who hold a bachelor's degree in medical laboratory science to prepare for advanced clinical, technical, and administrative career opportunities. Through courses, and research projects, students enhance their proficiency in a chosen medical laboratory science discipline: clinical chemistry, hematology, histopathology, parasitology or microbiology. Certification of a master degree in medical laboratory sciences in different disciplines is available upon completion of specific requirements.



The program has three course sequence areas in which students take advanced theoretical courses: general course sequence, specialty course sequence and research course sequence. A thesis as a partial fulfillment to the course is required. The program is designed to take a full-time student two years to complete. Depending upon their individual experience, graduates of the program should bring another level of intellectual stimulation to their present

position, assume new professional roles, or elect to use their master degree work in preparation for doctoral study.

**Accreditation:** The Master degree program is accredited by the Ministry of Higher Education.

**Credential Conferred:** Master of Science in Medical Laboratory Sciences degree.

**Length of Study:** Approximately two years full-time for certified medical technologists.

The student is certification eligible upon completion of the program. Students must:

Pass required courses with a minimum of 60%.

Present a thesis that reports original research within the student's chosen discipline, and Pass a final thesis and examination.

## **GENERAL:**

The general course sequence requires a minimum of sixteen semester credit hours. It includes a multi-term divisional seminar and courses in immunology, general pathology, molecular biology etc .... Also courses extend to quality improvement management, technical assessment, and educational methodology. Students may gain lecture, discussion, and laboratory teaching experience by instructing in undergraduate Medical Technology courses.

## **SPECIALTY:**

The specialty course sequence consists of at least nine semester hours and includes courses in the specialty discipline of the student's choice. Specialties include

clinical chemistry, hematology, histopathology, parasitology and microbiology. Specialty course sequences are designed to provide in-depth scientific knowledge in the discipline of choice.

## **RESEARCH:**

The research course sequence consists of a minimum of nine semester hours and includes courses in research methodology, quantitative methods, scientific inquiry, and statistics. Thesis and project credits are recorded as part of the research core.

## **M.Sc. Credit Hours**

### Foundation year (Semester 1)

Code	Subject	CH
MLS 601	Immunology	2
MLS 602	Scientific English	2
MLS 603	Molecular Biology	2
MLS 604	Laboratory Safety	2
MLS 605	Research Methodology	2
MLS 606	Biostatistics	2
MLS 607	General Pathology	2
MLS 608	Computer	2
	Total	16

**Specialization (Semester 2)**

Code	Subject	CH
MLS 609:1	Microbiology	9
MLS 6010:1	Haematology	9
MLS 6011:1	Histopathology	9
MLS 6012:1	Chemical Pathology	9
MLS 6012:1	Parasitology	9
MLS 6013:1	In Service training	9
MLS 6014:1	Special Courses (Advance Teaching)	9
MLS 6015:1		
	Total	9

**Specialization (Semester 3)**

Code	Subject	CH
MLS 609:2	Microbiology	12
MLS 6010:2	Haematology	12
MLS 6011:2	Histopathology	12
MLS 6012:2	Chemical Pathology	12
MLS 6013:2	Parasitology	12
	Total	12

**Dissertation (Semester 4)**

Code	Subject	CH
MLS 6016	Dissertation	9
MLS 6016	Dissertation	
	Total	9

: One Specialization for One Student

: Require for all student

**Contacts:**

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## 12-MSc in Nursing Sciences

### Why study with us

The MSc. degree of Science in nursing is an advanced-level graduate degree for registered professional nurses and is considered an entry level degree for nurses educators and managers, and is designed to provide the student with knowledge, values and skills necessary for the practice of advanced professional nursing at secondary and tertiary levels within a variety of settings by using management theory and leadership skills to improve health care delivery and nursing practice. The teaching faculty continuously assesses, evaluate, support and encourage the multicultural enrolled students.

### Currently seven areas of specialty are offered:-

1. Paediatric and Child Health Nursing.
2. Community Health Nursing.
3. Medical –Surgical Nursing.
4. Cardiothoracic Nursing.
5. Psychiatric and Mental Health Nursing.
6. Obstetric and Gynecological Nursing.
7. Emergency, casualty and Disaster Nursing.

### Entry requirements:

- Bachelor's degree in Nursing Sciences, from an accredited / recognized university in Sudan or its equivalent from abroad.
- A minimum of two years of valid clinical experience

following graduation.

- Registration and license from the National Council for Medical &Health Professional.
- Othergraduaterequirements of the UMST.

### English language requirements:

Twenty years ago, the English language was considered a necessity for international communication this is still the case today. Applicants shall be interviewed for assessment of their suitability and their reasonable command of English language. Two months of comprehensive English course as prerequisite to master degree will teach to students at the beginning of the first semester.

### Taught courses:

The duration of the program is planned to run over two full-time academic years i.e. a total of 72 working weeks. (4semesters) each year, 36 weeks, is divided into two semesters of 18 weeks each.

### First Semester: (18 weeks)

Subject Code	Subject	CH
NUR- 601	Epidemiology.	2
NUR - 602	Bio- Statistics.	2
NUR - 603	Scientific Research Methodology.(& Nursing Research)	2
NUR - 604	Computer Science & Net.	2
NUR - 605	Scientific English	2
NUR - 606	Medical / Nursing Education	2
<b>Total</b>		<b>16</b>

### Second Semester: (18 Weeks)

Subject Code	Subject	CH
NUR- 608	Nursing Specialty (Theory & Practice)	10
NUR- 609	Nursing Ethics & Laws in Practice	2
NUR- 610	Clinical Pharmacology	2
NUR- 611	Health Informatics	2
NUR- 612	Educational Psychology	2
<b>Total</b>		<b>18</b>



### Third Semester: (18 Weeks)

Subject Code	Subject	CH
NUR- 613	Nursing Specialty (Theory & Practice)	8
NUR- 614	Nursing Theories Development & Application	2
NUR- 615	Health Economics	2
NUR- 616	Health Planning & Nursing Management.	2
NUR- 617	Research proposal.	6
<b>Total</b>		<b>20</b>



### **Fourth Semester: (18 Weeks)**

Subject Code	Subject	CH
NUR- 618	Nursing Specialty (Theory & Practice)	10
NUR- 619	Research Work	8
<b>Total</b>		<b>18</b>

### **Research Opportunities:**

In the first semester, identification/selection of a nursing research problem and submission of the proposal Research Protocol .The second year's second semester will be devoted to practice and writing of the research dissertation. MSc. Nursing program develop skills in scientific research for improvement of the health care system

### **Careers**

Our graduates are prepared to work at an advanced level as clinical nursespecialists,nurse–educators, nurse administrators, community health nurses and researcher in Sudan and worldwide. The MSc. Nursing provides the foundation as a prerequisite for doctorate-level in Nursing.



### **Contacts**

Ms.Maha Gibreel Mohamed  
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mobile:+2490928534223

# 13-M.Sc in Pharmaceutical Analysis and Quality Control

## Why study with us?

The program is designed for pharmacy graduates and other related disciplines seeking career in pharmaceutical analysis and quality assurance. It is also projected for those who are currently employed in the national regulatory authorities, pharmaceutical industry, chemical industry, research centers, or instructors at universities or high education institutes. Medicines for use are required to meet very strict and exact standards which relates to their quality, safety

and efficacy. The evaluation of quality, safety and efficacy of drugs and herbal preparations are estimated and measured by the adoption of certified analytical procedures, which this program has adopted. Quality assessment of pharmaceuticals and their formulation is dependent upon the existence of well trained personnel capable of performing all the required analytical and spectroscopic techniques specified in the international pharmacopoeias or the regulatory authorities. Training of these qualified personnel is the main goal of this M.Sc. Program.

Candidates enrolled in this program are expected to gain the appropriate scientific knowledge and practical skills that enable them to:

- i. Gaining the theoretical scientific knowledge, experimental experience and technical talents of how to implement certified official methods of analysis of pharmaceutical and chemical products and their raw materials.
- ii. Undertaking a critical review of the relevant literature of the field of pharmaceutical analysis and quality control.
- iii. Understanding the range of methodological possibilities and find out the proper means for their applications by acquiring the appropriate practical and experimental talents and technical skills.
- iv. Realizing the importance, validity and reliability of the analytical methods and gain the ability in interpreting analytical data results obtained from them.

## Entry requirements:

The program is designed for pharmacy graduates and other related disciplines seeking career in pharmaceutical analysis and quality assurance. Applicants qualify for the programme if they have B. Pharm. Degree from UMST or its equivalent or honour degree in chemistry or chemical engineering with at least one year work experience in the pharmaceutical industry.

The applicants shall be interviewed for assessment of their suitability, knowledge and command of English language.

## Taught courses

Student enrolled in the programme will learn about a broad range of analytical and spectroscopic

techniques through lectures or practical sessions. The courses offered by this program are shown below

### Semester One

Course Title	Duration (Cr Hrs)
Analytical Chemistry	3(2 + 1)
Chromatography I	3 (2 + 1)
Spectroscopic Methods of Analysis I	3 (2 + 1)
Quality Assurance	2 (2 + 0)

### Part 1 Semester Two

Course Title	Duration (Cr Hrs)
Research Methodology	2 (2 + 0)
Chromatography II	3 (2 + 1)

Spectroscopic Methods of Analysis II	3 (2 + 1)
Total Quality Management	2 (2 + 0)

### Semester Three

Course Title	Duration (Cr Hrs)
Quality Control of herbal preparations	3 (2 + 1)
Drug Stability	2 (2 + 0)
Combined Application of Spectroscopic Methods of Pharmaceutical Analysis: UV/IR/NMR/MS	2 (2 + 0)
Pharm. Statistics	2 (2 + 0)

### Semester Four

Research Project	9 CH
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## **Research Opportunities**

The programme provides a wealth of interesting research topics for the programme participants and numerous opportunities to pursue a wide range of research.

## **Career opportunities**

Being acquired with the appropriate scientific knowledge, laboratory talents and practical skills needed in pharmaceutical quality control of drugs and pharmaceuticals, the graduates can work in the following areas:

Regulatory bodies such as governmental bodies concerned with the quality of drugs  
Pharmaceutical industries' quality assurance/control, management, production, Research and Development.

Academic and research institutes

Other related areas

## **Contacts**

Assoc.Prof. Dhia Eldin A/ Elmagied  
Elhag

Programme Coordinator

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## 14 - M.Sc in Pharmaceutical Technology

### Why study with us?

The last few years had witnessed an increasing number of registered pharmaceutical and drug manufacturing plants and indeed many applications are submitted to the concerned Drug and Poison Directorate of MoH for approval. This necessitates the advancement in all the manufacturing sites and the use of high technologies to obtain a quality product. This increase in pharmaceutical firms also requires parallel technological advancement in its quality assurance/control laboratories as in the regulatory authority laboratories. All these functions

pertaining to pharmaceutical manufacturing and quality assurance/control cannot be achieved without the employment of highly qualified pharmacist.

The programme has been developed to meet the needs of diverse groups: those in the pharmaceutical industry who need to upgrade their existing skills and/or acquire new skills and knowledge in other areas of industry, and those contemplating a career change who require relevant knowledge and experience of the pharmaceutical industry.

Entry requirements:

Applicants qualify for the programme if they have B. P. harm. Degree from UMST or its equivalent.

### Taught courses

Student enrolled in the programme will learn about a broad range of formulations and pharmaceutical technologies through the use of examples and case studies along lectures on lectures on underpinning sciences. He/she will be given hand-on experience in a number of preformulation and formulation technologies, biotechnology, drug stability, quality assurance/control, management and regulatory affairs.

### Semester One

Course Title	Duration (Cr Hrs)
Pharmaceutical Chemistry: Kinetics & Drug Stability	2 (2 + 0)
Pharmaceutical Dosage Form Design	3 (2 + 1)

Drug Analysis & Quality Control	3 (2 + 1)
Herbal Drugs' Technology	2 (2 + 0)

### Semester Two

Course Title	Duration (Cr Hrs)
Research Methodology	2 (2 + 0)
Pharm. Microbiology & Sterile Manufacturing	3 (2 + 1)
Biopharm. Development & Investigational Medicinal Products	2 (2 + 0)
Pharm. Statistics & Process Control Part 1 Semester Three	2 (2 + 0)

### Semester Three

Course Title	Duration (Cr Hrs)
Pharm. Plant & Process From Design to Validation	3 (2 + 1)
Pharm. Manufacturing-API to Finished Product	3 (2 + 1)
Quality Management System & Regulatory Affairs	2 (2 + 0)
Pharm. Biotechnology	3 (2 + 1)
Role & Professional Duties of the Qualified Person	2 (2 + 0)

### Semester Four

Research Project	9 CH
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### Research Opportunities

The MSc programme is suitable for people working in industry and research institutes and is designed to offer opportunities for quality laboratory-based research in pharmaceutical technology, biotechnology, process development, quality assurance, quality control, drug stability and other pharmacy practice research topics.

### Career opportunities

The graduate qualification allows pharmacy professionals to develop their chosen career path within the pharmacy profession by providing advanced pharmaceutical knowledge, problem-solving skills

and a critical awareness of the role of pharmaceutical services within the workplace.

The range of careers to choose from includes:

Drug and pharmaceutical industries' formulations, production, R & D, quality assurance/control, management.

Academic and research institutes  
Governmental pharmaceutical settings: quality assurance/control, hospital pharmacy, management, drug licensing and registration of pharmaceutical manufacturing companies.

## Contacts

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## 15 - MSc in Pharmacology

The need for qualified

pharmacologists is in line with the large numbers of medical schools in the country. We have graduated hundreds of master students in three main specializations:

1. Clinical pharmacy/ pharmacology
2. Pharmacokinetics
3. Basic Pharmacology.

The success of this master is evidenced by the large number of our graduates who are teaching in several medical schools, paramedical institutions and the great number of clinical pharmacists who are working in teams in several hospitals for the benefit of patients

care. The programme takes over 70 candidates every year which is one third of the numbers who apply attesting to the popularity of the offering. Our graduates are working in Sudan, the region, Europe, and North America.

### **Entry requirements:**

Bachelor's degree in Pharmacy, Medicine, and Dentistry, from a recognized university.

### Entrance Examination:

Selection of candidates shall be made by the results of the interview and an entrance examination.

### **English language**

### **requirements**

Applicants shall be interviewed for assessment of their suitability, knowledge and their reasonable command of English language which will enable them to study in English.

## **Taught courses:**

### **Semester One:**

Molecular Pharmacology	4 CH
Professionalism	2 CH
Biostatistics	3 CH

### **Semester Two:**

CNS Drugs	3 CH
Cardiovascular Drugs	3 CH
Endocrinology	3 CH

### **Semester Three:**

Clinical Pharmacy Specialization	3 CH
Pharmacokinetics Specialization	3 CH
Basic Pharmacology Specialization	3 CH

### **Semester Four:**

Dissertation	9 CH
Research Opportunities	
The pharmacology master	

programme offers the opportunity to do research in all aspects of pharmacology, clinical pharmacy and pharmacokinetics.

### **Careers**

Our graduates are very popular in all medical schools, Ministry of Health, and teaching staff in different academic institutions nationally, in the region and internationally.

### **Accreditation:**

Our Master programme is accredited in the United States by many Accreditation Boards. Our graduates are also accepted in Canada

### **Contacts**

Prof.Abdalla Omer Elkhawad  
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E-mail:aoelkhawadster@gmail.com



## 16 -MSc in Public and Tropical Health

### **Why study with us**

In view of the need for the specialization in Public & Tropical Health and the importance of augmenting the appreciable efforts of the governmental institutes, coupled with the ever-growing number of donors and nongovernmental organizations, UMST in 2002 has launched a high standard M.Sc. degree course in Public and Tropical Health, developed for candidates from a wide range of professions.

With the remarkable success in this field, the Public and

Tropical Health programmes spanned to include the following postgraduate studies:

1. MSc in Family Medicine, launched in June 2013
2. MSc in Tropical Medicine and Infectious Diseases jointly, launched in October 2009
3. Postgraduate Diploma in Family Medicine, launched in April 2009
4. Postgraduate Diploma in HIV/AIDS, launched in May 2008
5. Postgraduate Diploma in Epidemiology and Biostatistics, launched in October 2007

### **Entry requirements:**

For M.Sc. in Public Health Bachelor's degree in Medicine, Dentistry, Pharmacy, Veterinary Sciences, from a recognized university.

Bachelor's degree (with honors) in Science, Public Health, or Medical Laboratory Sciences, from a recognized university

Bachelor's degree in Health Sciences, Social Sciences and other related subjects are also eligible, on condition that candidates should have satisfactory background in the field of Public Health.

## Taught courses

General Stream

### Semester I

*(For both General Stream and Hospital Management Specialization)*

Code	Modules	C.H
PTH 601	Module (1) Concepts of Public Health*	5
PTH 602	Module (2) Organization and Management of Health Care.	3
PTH 603	Module (3) Health Measurements	4
PTH 604	Module (4) Research Methodology	3
PTH 605	Module (5) Environmental and Occupational Health.	3
PTH 606	Ramadan and Eid	
	Module (6) Health Promotion and Primary of Health care.	4
	Total	22

\*/\*\*This module is conducted for 2 hours of seminars, tutorial, lectures, and assignments weekly during the semester.

### Semester II

Code	Modules	C.H
PTH 607	Module (1) Disease causation and prevention	7
PTH 608	Module (2) Medical sociology – Health Education and Communication Skills.	4
PTH 609	Module (3) Community Directed of Intervention(CDI).	2
PTH 610	Module (4) Health Economics.	3
PTH 611	Module (5) Disaster Management.	2
PTH 612	Module (6) Health Ethics.	2
	Total	20

Practical and field work in the first 2 semesters is provided according to the requirements of each module.

### Semester III

Code	Modules	C.H
PTH 613	Research project: Data collection, analysis, writing up and submission of Dissertation.	6

We invite experts from different parts of the world to participate in the teaching of our postgraduate student

### Research Opportunities

The Public Health Programme, in view of our approach towards forming strong research partnerships nationally, regionally and internationally;

established collaboration with the United Nations University in Malaysia, The Royal College of Surgeon Ireland and many other partnerships in the field of teaching, research and exchange of expertise

### **Careers**

Some of our graduates are actively involved in the field of public and tropical health with the following;

### **1. Ministry of Health:**

- Directorate General of International Health
- UN Agencies Directorate
- Emergency & Humanitarian Action Directorate.
- The National Lymphatic

- filariasis Control Programme
- Sudan National AID Control Programme
- Epidemiology Department.

### **2. National & Internal Organizations:**

- World Bank
- Internal Rescue Committee

### **3. Research and Projects:**

- The National Research Centre
- Special Programme for Research & Training in Tropical Diseases
- Population Council Researches.
- Global Fund Projects (HIV/AIDS)

### **Testimonies**

Our graduates are speared across the globe, serving in different UN departments, academic institutions and health facilities

### **Contacts**

Dr Hanan Tahir

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[hanantahi@gmail.com](mailto:hanantahi@gmail.com)

Tel+249-183-224175- Ext 108

(For all programmes)



## 17 - M.Sc. in Tropical Medicine and Infectious Diseases (TMID)

### Why study with us?

Tropical and infectious diseases bear a wide spectrum and inevitable burden to human lives; they remain a prominent cause of morbidity and mortality in tropical countries including the Sudan. Moreover, there is a real need for this specialization by the growing number of doctors interested to work in this specialty. An initiative taken up by the University of Medical Sciences

& Technology to implement this master programme in Sudan

control of the major parasitic, bacterial, and viral diseases of tropical countries.

#### **Aims:**

This course aims to provide training in clinical tropical medicine and infectious diseases and to develop candidates' knowledge and comprehension to the preventive and curative management strategies which promote health and well-being in tropical countries

Upgrade clinical skills in tropical and infectious diseases in order to make appropriate clinical decision.

Demonstrate knowledge and skills in diagnostic laboratory methods.

Apply epidemiological principles, analyse and interpret statistical tests.

Introduce concepts and strategies of prevention and control of diseases.

#### **Objectives:**

By the end of this course the students should be able:-

Describe the causation, pathogenesis, clinical features, diagnosis, management and

### **Admission requirement:**

Admission into Master of Tropical Medicine and Infectious Diseases Programme

Applicants qualify for admission to Master of Tropical Medicine and Infectious Diseases programmes if they hold an MBBS degree from UMST or equivalent qualification from another recognized university.

Applicants must complete their housemanship and full registration with the Sudan Medical Council or equivalent before being admitted to the programme

Applicants with some work experience also have additional advantage

Interview: - At Faculty and Programmes level applicants, shall be interviewed for assessment of their clinical and academic suitability, knowledge and their reasonable command of English language.

### **Course duration:**

Duration is two academic years (3 semesters)

Course Structure

### **First semester**

Course Code	Course name	Theory HRS/WK	Clinical /practical HRS/ WK	Total HRS /WK
TMID 601	Clinical Tropical Diseases I	2	8	10
TMID 601	Diagnostic Tropical Diseases I	2	2	4
TMID 601	Child Health and Nutrition I	2	-	2
TMID 601	Immunology and Advanced Diagnostic Techniques	2	2	4
TMID 601	Epidemiology and Biostatistics	2	-	2
	Total	10	12	22

**Second semester (20 weeks)**

Course Code	Course name	Theory HRS/ WK	Clinical /practical HRS/ WK	Total HRS /WK
TMID 606	Clinical Tropical Diseases II	2	8	10
TMID 607	Diagnostic Tropical Diseases II	2	2	4
TMID 608	Child Health and Nutrition II	2	-	4
TMID 609	Non-Communicable Diseases	2	-	2
TMID 610	Research Methodology	2	-	2
TMID 611	Concepts of prevention and control of Diseases	2	-	2
	Total	12	10	22

**Third semester**
**(20 weeks)**

Course Code	Course name
TMID 612	Research project: proposal writing data collection, Analysis, writing up and submission of dissertation



## **18- Master in Mass Communication**

This master program offers a cross-disciplinary insight into the changing landscape of the media industries from mass communication and public relations to the new digital age.

The master program nurtures and builds on your individual experience as a media user or amateur content creator, but it also enhances your awareness and understanding of how media and public relations are shaping the world we live in today, and how humanity will evolve within Artificial Intelligence and environmental concerns.

The master offers a diverse curriculum covering media and public relations histories, media now, and future media.

Mass Communication and public relations studies have been described

as "the defining subject of our age". So when you choose this Media and Communications and public relations MA, you will be developing your professional portfolio of media and communication projects. You'll explore different aspects of the media industries and professions such as strategic communication, media production, public relations, advocacy, marketing and advertising, digital art, creative writing and so many other areas which speak to your individual interests and potential future career paths.

This master program is composed of three semesters with complementary research. This program is delivered in English and Arabic, taught by highly qualified teaching staff.

The faculty has graduated twelve master students in Batch one and now is running Batch two with nine students.

Faculty of Mass Communication awards Master of Mass Communication and Public Relations to candidates who complete courses during three semesters (30 credit hours) and supplementary graduation research (6 credit hours), or by research after completing a period of at least two years.

The master program seeks to achieve the skills that enable students to integrate into society, namely:

Candidates adhere to values, traditions and cultural legacies in their profession and social behavior.

Commitment to honesty, objectivity, integrity, and social and academic responsibility.

Implementing tools and mechanisms that contribute to confirming those values.

**The master program has  
three semesters:**  
**Semester One:**

Course Code	Course name	Credit hours	practical + Theory hours
MCPR 601	Seminar in Mass Communication	3	2+2
MCPR 602	Seminar in Public Relations	3	2+2
MCPR 603	Journal and Resources News Applications	3	2+2
MCPR 604	Graphic Design	3	2+2
<b>Total</b>		<b>12</b>	

**Semester Two:**

Course Code	Course name	Credit hours	practical + Theory hours
MCPR 605	Public Opinion	3	2+2
MCPR 606	Media Law and Ethics	3	2+2
MCPR 609	Research Methodology	3	2+2
MCPR 608	Readings in Mass Communication	3	2+2
<b>Total</b>		<b>12</b>	

**Semester Three:**

Course Code	Course name	Credit hours	practical + Theory hours
MCPR 607	Media and Internet	3	2+2
MCPR 610	Media Institutions Management	3	2+2
MCPR 611	Project	6	2+2
<b>Total</b>		<b>12</b>	

**Entry Requirements:**

BA Honours (5 Years) in Mass communication with at least grade good.

BA in Mass communication or any other fields plus Post Graduate Honor in Mass Communication.

**Contact :**

Musa Elkheir

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Email: musaelkheir@gmail.com

## 19 - Global MBA in Impact Entrepreneurship

The Global MBA in Impact Entrepreneurship is a 12 month program offered by E4Impact Foundation with University of Medical Sciences and Technology (UMST) and ALTIS – Graduate School of Business and Society of the Universita Cattolica del Sacro Cuore, Milan Italy.

The MBA is project-based. Each course responds to a specific need that arises in the starting or scaling of a business. In the classroom lecturers and business experts

use a workshop type format to share innovative tools. These workshops feature group projects and meetings with successful entrepreneurs. Distance learning consists in the guided application of these tools to the entrepreneurs business and in assignments geared to the field testing of these tools. The final output expected is a proven business model and an investment ready business plan. It supports both active and aspiring entrepreneurs to:

Develop the business skills necessary to guide a new venture of scale and existing business; Utilize tools and solutions for the start –up or scaling of a high

growth business; Develop a personal network of mentors and investors; Establish links with entrepreneurs across Africa. It's flexible formula combines class work, distance learning and coaching that allows entrepreneurs to work and build their business while they attend. The MBA is taught by both local and international business professors and awards an International degree from Universita Cattolica, Milan, Italy.

### **Contact:**

Dr.Yusuf Kani Yusuf.  
[kaniyusuf55@gmail.com](mailto:kaniyusuf55@gmail.com)  
mobile:+249 925661328

Contact Period	Objectives	Courses	Calendar
Initial Boot Camp	<ul style="list-style-type: none"> <li>• Design your Business Model</li> <li>• Learn how to pitch</li> <li>• Digital communication tools</li> </ul>	<ul style="list-style-type: none"> <li>• Business Model Design</li> <li>• Business Model Pitch</li> <li>• Networking for Growth: Digital Comm. Counselling</li> </ul>	Dec 14 - Dec 19, 2020
Week End 1	<ul style="list-style-type: none"> <li>• Acquire Finance Skills and Concepts</li> </ul>	<ul style="list-style-type: none"> <li>• Accounting for Entrepreneurs</li> </ul>	Jan 23-26, 2021
Week End 2	<ul style="list-style-type: none"> <li>• Plan your Operations</li> <li>• Develop your Business Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Process and Project Management</li> <li>• Networking for Growth: Impact Investing Counselling</li> </ul>	Feb 20-26, 2021
Marketing Boot Camp	<ul style="list-style-type: none"> <li>• Address your Market</li> <li>• Define your Marketing Strategy</li> <li>• Learn how to sell and negotiate</li> <li>• Create marketing materials</li> </ul>	<ul style="list-style-type: none"> <li>• Go To Market: Market Analysis</li> <li>• Go To Market: Entrepreneurial Marketing</li> <li>• Go To market Pitch</li> <li>• Sales and Negotiations</li> <li>• Networking for Growth: Marketing Counselling</li> </ul>	Mar 20-23, 2021
Week End 3	<ul style="list-style-type: none"> <li>• Recruit Your Team</li> <li>• Understand what leader you are</li> <li>• Manage legal dilemmas</li> </ul>	<ul style="list-style-type: none"> <li>• Human Resources Management &amp; Leadership</li> <li>• Networking for Growth: Head Hunting</li> <li>• Networking for Growth: Legal Counselling</li> </ul>	May 22 - 25, 2021
Week End 4	<ul style="list-style-type: none"> <li>• Exploit your Competitive Edge</li> <li>• How to register IP and defend innovation</li> </ul>	<ul style="list-style-type: none"> <li>• Business Strategy</li> <li>• Networking for Growth: Intellectual Property Counselling</li> </ul>	June 26-2nd July 2021

Finance Boot Camp	<ul style="list-style-type: none"> <li>• Build your Financial Plan</li> <li>• Develop your Business Plan</li> <li>• Pitch to investors</li> </ul>	<ul style="list-style-type: none"> <li>• Financial Planning</li> <li>• Business Planning Lab (1)</li> <li>• Financial Model Pitch</li> </ul>	August 7-10, 2021
Week End 5	<ul style="list-style-type: none"> <li>• Assess your Financial Needs</li> <li>• Meet impact investors</li> <li>• Develop your Business Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Entrepreneurial Finance</li> <li>• Networking with Investors and Fund raisers</li> <li>• Business Planning Lab (2)</li> </ul>	September 4-7, 2021
Week End 6	<ul style="list-style-type: none"> <li>• Navigate ethical dilemma</li> <li>• Register your Company</li> <li>• Meet impact investors</li> <li>• Measure your impact</li> </ul>	<ul style="list-style-type: none"> <li>• Responsible Management &amp; Impact Measurement</li> <li>• Networking with investors and fund raisers</li> <li>• Business Planning Lab (3)</li> </ul>	October, 23-29, 2021
Final Boot Camp	<ul style="list-style-type: none"> <li>• Scale your business</li> <li>• Pitch to investors</li> </ul>	<ul style="list-style-type: none"> <li>• Tutorials on investor's Pitch</li> <li>• Business Scaling Lab</li> <li>• Investor's Pitch Development</li> <li>• Investor's Pitch Simulations and Fine-tuning</li> <li>• Investor's Competition</li> <li>• Feedback session</li> </ul>	November 20-27, 2021
Graduation Ceremony	<ul style="list-style-type: none"> <li>• Join the E4Impact Alumni</li> </ul>	<ul style="list-style-type: none"> <li>• Graduation Ceremony</li> </ul>	December, 2021



# **Diploma of Research Methodology and Biostatistics**

## **WHY STUDY WITH US?**

Health research is a fundamental tool for providing reliable, valid and up-to-date information on the current health situation in Sudan and any other country. This, in turn, enables scientists, decision makers, health managers and representatives of the public to better understand their health problems and to develop and implement sound solutions for their control. The first step towards achieving these target objectives is to enhance the research skills and capabilities among researchers,

health managers and decision makers through theoretical and practical training on research methods and biostatistics.

The Diploma Program in Research Methodology and Biostatistics was launched in the year 2006 aiming at training workers in the health field and related fields the basic skills required for conducting proper research projects that will meet international standards and that will help achieving the overall objective in developing scientific and reliable strategies to tackle health problems.

## **ENTRY REQUIREMENTS**

Applicants qualify for admission

to Post-Graduate Diploma in Research Methodology and Biostatistics if they hold a bachelor degree from UMST or its equivalent. At the Program level, applicants shall be interviewed for assessment of their suitability, knowledge and their reasonable command of English language which will enable them to study in English. In addition, applicants shall provide evidence of good computer skills. A candidate shall possess one of the following as evidence:

Evidence of computer courses completed during undergraduate studies or postgraduate studies.

Evidence of computer courses completed at approved and accredited institutes.

UMST computer qualification Examination.

## **TAUGHT COURSES**

The following are the modules covered during the Diploma program and their approximate timing:-

### **Phase (I) 12 weeks**

- Module (1): Quantitative Research Methods 4 weeks
- Module (2): Qualitative Research Methods 3 weeks
- Module (3): Biostatistics & SPSS 3 weeks
- Module (4): Literature Search 1 week
- Module (5): Research Ethics ..... 1 week

### **Phase (II) . 12 weeks**

- Module (6): Critiqual Appraisal & Journal Club 2 weeks

- Module (7): Proposal Writing 1 week
  - Plenary Sessions 1 week
  - Preparatory Activities for Field Work ...1 week
  - Data Collection & Analysis 3 weeks
- Module (8): Thesis Writing 2 weeks
  - Submission of Completed Project Works 2 weeks

## **RESEARCH OPPORTUNITIES**

In view of the program approach towards increasing research capacity in developing couriers and sharing knowledge and expertise to form strong research partnerships nationally, regionally and internationally, the

program successfully established collaborations with the EMRO/ WHO and EDULINK/Zimbabwe in the form of ToT workshops and many other partnerships in the field of teaching, research and exchange of expertise.

## **CAREERS**

Because of their capabilities in scientific research, our graduates are very popular candidates in research-specialized academic or health institutions.

### **Contact:**

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mobile:+249 916475305

# DIPLOMA in DEVELOPMENT STUDIES

## **Why Study with us?**

A post-graduate Diploma in Development Studies is meant to qualify students from different faculties at different universities to enroll for a Master Program in the same area (Development Studies).

Development studies is an interdisciplinary and multidisciplinary field of study which seeks to understand economic, political, social and cultural facets of societal change, mainly in developing countries. It focuses at contributing

to potential solutions to resolve societal issues which development and its absence may create.

A Post-graduate Diploma that qualifies students from different disciplines to register for a Master Degree in the same specialization, holds good promises for a successful and thrilling career in both private and government sector organizations. Development Studies combines many social sciences and career opportunities. Development Studies will enable graduate students to be competent enough when it comes to research, preparation and synchronization of policies at both local and international levels.

## **ENTRY REQUIREMENTS.**

Applicants for a Post-graduate Diploma in development Studies qualify for admission if they hold a general bachelor degree from UMST or any other recognized university by the Ministry of Higher Education & Scientific Research.

## **ENGLISH LANGUAGE REQUIREMENTS.**

The medium of instruction is English language. Accordingly, proficiency with English language is required.

### **First semester.**

Subject Code	Subject	CH
SCP 613	Critical Perspectives on Development	3
SCP 613	Issues in Conflict, Peace and Reconstruction	3
SCP 613	Community Development	3
SCP 613	Gender and Development	3
<b>Total</b>		<b>12</b>

### **Second semester.**

Subject Code	Subject	CH
SMI 623	Microfinance	3
SLR 623	Local and Regional Development	3
SEG 623	Employment and Globalization	3
SMI 623	Migration, Internal Displacement and Refugees	3
SDS 623	Current Issues in Development Studies (Research Paper)	6
<b>Total</b>		<b>18</b>



### **Contact:**

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**PhD at UMST  
IS INFINITY  
AND  
...BEYOND**

# **DOCTOR OF PHILOSOPHY IN NURSING SCIENCES (Ph.NSc)**

## **1. Why study with us**

Nursing is profession with its own body of knowledge. It is a science of services for people that is continuously developed and directed the human wellbeing for the individual, family, and community. The main goal of nursing service is empower to develop their health potential to the highest possible level.

This Doctor of philosophy in Nursing Sciences programme aims to prepare leaders in the development of nursing science, the quality of nursing service,

and of the health service system, through further /advanced practical nursing preparation in the following main nursing specialties

1. Obstetrical / Gynecological Nursing
2. Pediatric Nursing
3. Community Health (Public Health Nursing)
4. Adult (Medical – Surgical Nursing)
5. Mental Health (Psychiatric Nursing)

## **Programme strategy:**

Offers opportunities for lifelong continuous self – directed learning Provides empathetic and empowering professional leadership. Improves effectiveness, quality of care and accreditation

## **Programme Structure**

The Doctor of nursing (Ph.NSc.) is a three years programme of fulltime doctoral study designed for professional nursing, MSc .N Degree holders seeking specialty preparation at an advanced level of nursing education and practice of the previously mentioned main five nursing specialties.

It prepares qualified nursing for leadership roles with emphasis on:

Philosophical, ethical, and scientific principles that provide the foundation for leadership in professional nursing care.

Continued acquisition of knowledge and clinical skills in an area of advanced practice specialization.

Evidence – based problem solving and decision making both

in practice and education. Analysis and examination of practice including completion of the required clinical / practicum, and research.

## **Ph. D. NSc . Professional Goals**

1. To promote and implement evidence – based practice in nursing education and clinical settings.
2. To utilize knowledge and skills obtained to positively impact, improve, promote The health of individuals, families and communities.

## **Programme Objectives:**

Upon completion of the programme the graduate will be able to:

- 1-Demonstrate advanced levels of educational and clinical judgment in nursing.
- 2-Critically analyze complex clinical situations and practice systems.
- 3-Evaluate and apply conceptual models, theories, and research in order to improve health care of diverse populations.
- 4-Systematically investigate a clinically focused area of nursing in order to advance health care.
- 5-Analyze the social, economic, political, and policy components of health care system in particular.
- 6-Assume leadership roles in the development of educational and clinical practice models, health policy, and standards of quality nursing care.

- 7-Integrate professional values and ethical decision – making in advanced nursing education and practice.
- 8- Ability to translate research into practice.

## **Evaluation**

Formative, ongoing: knowledge skill and attitudes.

- Case studies.
- Log books.
- Presentations.
- Clinical and field practice
- Class participation.
- Seminars.
- Scientific papers writing

Summative, Final examination: Written, clinical / practical, OSCE / OSPE and an oral Research (thesis /dissertation) and Critique of clinical nursing research findings

### **Programme duration:**

The programme duration is three years. The first two years consisting of courses and clinical training the third year for clinical training and the research project

### **Testimonies**

Graduates from the first batch of this PhD are now holding key positions in the faculties of Nursing in Sudan, KSA and the Gulf

### **Contacts**

Faculty of Nursing Sciences  
UMST  
Khartoum-Sudan



# Doctorate of Business Administration (DBA)

## **Why study with us?**

The faculty of Business Administration was established in 2003 to serve society needs by providing a breed of qualified, creative and innovative business graduated. The Doctorate of Business Administration was initiated in 2015 to cater for those who want to further their careers with the most advanced business degree. The DBA program is designed to enable academicians as well as practitioners to contribute to the body of applied knowledge after being equipped with an in depth and advanced knowledge

of Business Administration literature. The program is based on an advance course work delivered by our experience permanent staff in management, marketing and accounting.

## **Program objectives:**

- 1-To quality graduates who can contribute to the advancement of their professions
- 2-To allow candidates to conduct applied and problem -solving research for the mutual benefits of their employing organizations and their own careers.
- 3- To educate excellent scholars as qualified business, teaching, research, training and consultancy staff.

## **Admission Requirements:**

1. An MBA degree with grade merit (a minimum of cGPA of 3.0), M.Sc degree in business administration with at least(Good) grade.
2. A working experience of not less than 5 years after obtaining the first degree B.Sc or BA.
3. Evidence of fluency in the English language by :
  - a. A score of 550 points in paper based TOEFL or band 6.0 ILETS, or
  - b. Passing the UMST admission test in the English Language.
4. Computer literacy.
5. Passing the admission interview.

## **Taught Courses:**

The award of the DBA degree requires successful completion of 60 credit hours as follows:

## **1. DBA Mandatory General Core Courses (12 CH):**

Course Code	Course Title	C.H
MGTM 701	Organization Theory	3
MGTM 702	Seminar in Strategic Management	3
MGTM 703	Leadership Theories & Practice	3
ECON701	Advanced Economic Analysis	3

## **2. DBA Mandatory Research Methods & Statistics Courses (9 CH):**

Course Code	Course Title	C.H
BRMM 701	Advanced Business Research Methods	3
BRMM 702	Advanced Business Statistics	3
BRMM 703	Multivariate Analysis	3

## **DBA Mandatory Skill Development Course (3 CH):**

Course Code	Course Title	C.H
SKDM 701	Skill Development	3

## **II. Specialization Courses:**

### **A. DBA in Management Specialization:**

#### **1. Management Specialization Core Courses (12 CH)**

Course Code	Course Title	C.H
MGTC 701	Current Issues in Management	3
MGTC 702	Advanced Studies in Process Management	3
MGTC 703	International Business & Management	3
MGTC 704	Organizational Change & Development	3

### **2. One Management Specialization Elective Course (3 CH)**

To be selected from the list of DBA Elective Courses.

### **B. DBA in Marketing Specialization:**

## **1. Marketing Specialization Core Course (12 CH)**

Course Code	Course Title	C.H
MKTC 701	Seminar in Marketing Theory	3
MKTC 702	Marketing Communication	3
MKTC 703	Current Issues in Marketing	3
MKTC 704	Advanced Marketing Research	3

2. One Marketing Specialization Elective Course (3 CH)  
 To be selected from the list of DBA Elective Courses  
 C. DBA in Accounting Specialization:

### ***1- Accounting Specialization Core Courses (12 CH)***

Course Code	Course Title	C.H
ACCC 701	Seminar in Management Accounting and Control	3
ACCC 702	Seminar in Accounting Theory Management	3
ACCC 703	Empirical Research in Accounting	3
ACCC 704	Seminar in Financial Reporting & Regulations	3

**2-One Accounting Specialization Elective Course (3 CH):**  
**To be selected from the list of DBA Elective Courses.**

ACCE 701	Seminar in Auditing Philosophy and Theory	3
ACCE 702	Seminar in Accounting in Not-for-Profit Organizations.	3

### ***List of DBA Elective Courses:-***

**The DBA candidate must study and pass one elective course equivalent to 3CH from the list below:**

Course Code	Course Title	C.H
MGTE 701	Corporate Governance & Corporate Social Responsibility	3
MGTE 702	Knowledge Management	3
MKTE 701	Advanced Service Marketing and Customer Relations Management	3
MKTE 702	Global Marketing	3

### ***Research Opportunities:***

The courses are followed by DBA dissertation. The DBA dissertation, which is equivalent to 21 credit hours, is to be completed in a minimum of one year and maximum of 3 years.

### ***Contact:***

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