THE OPEN UNIVERSITY OF TANZANIA

OFFICE OF THE DEPUTY VICE CHANCELLOR
(ACADEMIC, RESEARCH & CONSULTANCY)

Directorate of Undergraduate Studies

OUT ORIENTATION BOOKLET 2022-2023

Faculty of Science, Technology and Environmental Studies

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VISION

To be a leading open online University in knowledge creation and application.

MISSION

To persistently provide relevant, quality, flexible, accessible, and affordable open online education, research, and services to community for socio-economic development of Tanzania and the rest of the world

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VICE-CHANCELLOR'S MESSAGE

Dear Freshers and Continuing Students
On behalf of the Management of the Open University of Tanzania, I wish to extend a hearty welcome to all new students, who are joining the Open University of Tanzania this 2022/23 academic year. I am confident you will find your experience of learning at this university both fascinating and rewarding.

Dear Freshers
Our university has stated in its Vision Statement, **"To be a leading open online University in knowledge creation and application."** Its Mission statement clearly wants the university**, "To persistently provide relevant, quality, flexible, accessible, and affordable open online education, research, and services to community for socio-economic development of Tanzania and the rest of the world."**

It is within this context, that we offer training using blended learning approach. The blended learning system we are using, allows a student to learn through a variety of methodologies, including using printed learning materials (module), face to face lectures (organized by zoom online video conferencing application, or physical attendance in a classroom), as well as using e-learning through the university's learning management system, based on open-source software called 'Moodle'. The blended learning system, allows a lot of freedom to the student, to choose how he/she prefers to learn. However, complete capture of the course is possible through e-learning, because some of the zoom lectures can also be seen on the course link. We encourage students to form discussion groups using zoom, so that one can engage with colleagues in other regions, or even in other countries. Those who wish to meet physically are also encouraged to do so.

OUT has about 30 regional and coordination centres, in the United Republic of Tanzania. Students are free to visit and register at any of the regional or coordination centres of convenience. The coordination centres are at Unguja, Pemba, Kahama and Tunduru. We do also run some written examinations at some districts, including Mpwapwa, Korogwe, Mwanga, Karatu, Mbulu, Masasi, Tukuyu, Kyela, Chato, Ngara, Kasulu, Kibondo, Makete, Mafinga, Mbinga, Lushoto, Karagwe, Ukerewe, Kyela/Tukuyu, Serengeti, Nzega, Urambo, Nkasi, Inyonga, Tunduru, Longido, Kiteto, Kondoa, Ludewa, Kilwa, Ifakara, Kahama, Ikwiriri, Mafia, Magu, Misungwi, Biharamulo,

Manyoni and Handeni. There must be at least 50 registered candidates for any district to qualify as an examination centre, with no additional such as rental of examination halls and secure examinations steel boxes or safes. The university has coordination centres outside Tanzania, through collaborating institutions such as Egerton University and College of Human Resources in Kenya, Moi University, Triumphant University in Namibia, Uganda Management Institute in Uganda, St Mary's University in Ethiopia, and Laweh Open University of Ghana.

Dear students,

We are still facing some challenges of operational space in some regional centres. For Dar es Salaam region, we wish to have a centre in each of the five districts, i.e. Kinondoni, Ilala, Temeke, Kigamboni and Ubungo. However, the university has not found suitable and adequate infrastructure for renting in most districts. We also have experienced problems for the premises we were renting for Kinondoni Centre, but soon we shall acquire it permanently. We have been working had to get public premises from government departments and ministries that moved to Dodoma recently without much success. Hopefully, we can get facilities for some of the districts stated above, especially Ilala, Temeke and Kigamboni

Two years ago, the government of URT gave about 1.802 billion for the construction of five regional centres, namely Geita, Manyara, Simiyu, Lindi and Kigoma. The construction work in those regions is almost complete and our centres have already moved to the new buildings. However, we are still using rented premises for some regions including Arusha, Tabora, Songwe, Tanga, Pemba, while we are using public buildings at Katavi, Njombe and Mara. We have asked the Government to support us with buildings in five more regions, like last year, and we are hopeful of government support. Meanwhile, the Open University of Tanzania shall be one of the beneficiaries of the Higher Education for Economic Transformation (HEET), which aims to strength amongst other things, Science, Technology, Engineering and Mathematics (STEM) teaching in higher education public institutions. Under this programme, OUT will get SEVEN Science laboratory buildings in seven zones, i.e. Lake zone (Mwanza), Western zone (Kigoma), East Coast zone (Kibaha), Central zone (Dodoma), Northern zone (Arusha), Southern zone (Mtwara) and South West Highlands (Njombe). The designed buildings will have regional centre offices especially where we are using rented premises. Work will start soon. If this project is successful, we shall be able to have new regional centre offices for Ilemela in Mwanza city, Mtwara, Njombe, and Arusha, using space in the newly constructed laboratories.

Dear Freshers

Our university has unique features, that include strong management information system, that include student online course and examination registration, student academic records information system (SARIS), e-Learning Management information System (ELMS), Student E-mail system, online Library, On Demand examination system, Oral Examinations systems, etc. The university expects every student to familiarise himself/herself with these information systems, after the orientation session. For an OUT student, possession of a computer or a smart mobile device is mandatory. I advise you from the start, to obtain a device that will connect you to the university. If you are in a rural area, that has no electricity, you can acquire a simple solar power system. Otherwise, thanks to the efforts of our government, there is electricity in most rural areas.

Dear Freshers and Continuing Students

Studying at OUT, requires self-discipline and commitment. One has to be focused to his/her studies, must constantly be alert of ongoing programmes of teaching, especially the zoom lectures. The university will from time to time issue a teaching timetable, which students must observe, to timely connect to the lectures. At the end of the course, students will be assessed, based on submitted online assignments, main timed tests (MTT) and end of year university examinations (UE). It is important for every student to be familiar with examination regulations. The university has zero tolerance for cheating in examinations and anyone found guilty is subjected to punitive action, which may include expulsion from the programme.

On the other hand, the university offers on demand examinations, written or orally taken, where a student can request for exams or tests at any time. However, the examinations directorate organizes specific seasons for offering such exams, popularly known as ODEX. Once a student completes his/her course, he/she can request for the transcript and certificate. The university organizes at least ONE graduation ceremony per year, to provide an opportunity for students and staff celebrate their achievements.

Dear Students

During the 2019/20 academic year, about 12,916 students were admitted to various Non-degree, undergraduate and postgraduate courses. However, only about 6,600 were able to register. In the following year, 2020/21, about 13,231 new students were admitted, but only 6,825, less than 52%, were able to register. This matter is of great concern to us. We are working had to get HESLB provide more loans to our students. We are also at an advanced stage

in negotiations with NMB bank, so that they provide low interest loans to needy students. We encourage students to be patient while we pursue this option. So far, the HESLB have given loans to a total of 97 students out of whom 48 students are in first year.

Dear Students,
In conclusion, I wish to express my profound joy for having had an opportunity to interact with you, our dear students. It is my most sincere desire, that each one of you shall realise his/her dreams, through your engagement with the Open University of Tanzania. I wish you all the best, in your studies this academic year.

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THANK YOU!!!

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1.0 GENERAL ADMINISTRATION ACTIVITIES
1.1 Admission and Registration
Admission to undergraduate and none degree programmes is subject to satisfying the stipulated General University and Programme Admission Requirements as provided under The Open University of Tanzania (OUT) Prospectus.

1.2 Registration
1.2.1 Requirement for Registration
Newly admitted local students are required to pay Tshs. 210,000/= or its equivalence for international students prior to registration. The payment shall be made using control numbers generated from the student's application account used to apply for studies at the OUT. E.g. S5431/0004/2018 and password 123456, then click control number. A student also may obtain control numbers from any nearest OUT regional centres. Upon the payment, the student shall be given Student Academic Records Information System (SARIS) account by OUT officials that will enable them to register for courses and start learning.

1.2.2 Procedures for Course Registration
- Visit OUT website (www.out.ac.tz)
- Log into the SARIS account by using the username and password given.
- Click the course registration icon to access courses and follow the guidelines provided in the registration system.
- Confirm the course/courses registered and print the invoice for paying the remaining fee balance.
- The SARIS account is also used for examination registration, accessing online academic materials in the MOODLE platform, accessing examination results and viewing payment status.
- A student may register for all first-year courses as per programme requirements or may register for some of the courses depending on their ability to study and pay for the courses.
- Adding and dropping courses is allowed during course registration.
- Any student failed to register for courses during the registration period shall not be able to access materials in the Moodle platform and is not eligible to sit for examinations.
- Dates for the course registration are provided in the OUT almanack

- The university reserves the right to close or extend the registration period.

1.2.3 Registered Student
Newly admitted students shall be considered students of The Open University of Tanzania (officially) after paying the required initial fees and course registration.

1.2.4 Change of Study Programme
- Registered students may change programmes provided that they have entry qualifications into a programme they wish to switch to.
- The application for changing programme shall be made online through Open University Online Application System (OAS) within the first two weeks of the registration period.
- A fee of Tshs.30,000/- or its equivalent in foreign currency shall be paid for changing a programme by international students. The payment should be made using the control number issued at the OUT regional centres.

1.2.5 Postponement and Resume of Studies
- Application for the postponement of studies by students can be made within 14 days after the registration period. The postponement of studies shall be allowed after approval by the UGSC and Senate.
- The SARIS account of the student shall be closed during the postponement period
- A student who wishes to resume studies must request the university in writing.
- The request for the postponement and resumption of studies shall be addressed to DVC Academic under the first signature (ufs)of the Director of the OUT regional centre where the student resides.

1.2.6 De-registration from Studies After the Course registration
- Permission to withdraw from studies after the course registration shall be allowed in exceptional circumstances such as illness, personal or academic problems, or other unforeseen circumstances deemed acceptable to the university.
- Applications must follow procedures for de-registration as provided under the OUT-prospectus of 2021/22 academic year.

- Withdrawal from studies should be endorsed by the Dean of Students and approved by the Undergraduate Studies Committee (UGSC) and the Senate,
- Withdrawal from studies should be made at the end of the academic year only.

1.2.7 Student's Identity
- Identity cards for registered students shall be issued by the OUT regional centre where the student registered during the registration period.
- No student shall be allowed to sit for the examination or receive other OUT services without the OUT student identity card.

2.0 LEARNING AND TEACHING ACTIVITIES
2.1 Mode of delivery
Unlike other higher learning institution in Tanzania and the whole of East Africa sub region, OUT follows an Open Distance Learning (ODL) model of tuition, which represents a philosophy that combines the principles of learner-centeredness, lifelong learning, flexibility of learning, removal of barriers to access to education, recognition of prior learning and provision of relevant learner support.

At OUT, education is delivered through a Blended mode which comprises of mostly online interactivity between lecturers and students with minimum contact (face to face) sessions. The online learning activities are embedded on the Learning Management System (LMS) known as MOODLE which includes online discussion, online assignment, online seminar, online independent learning and online lecture, while the face to face sessions are mainly for field/laboratory/research/project work, teaching practice/tutorials as follows.

Real time (live) online lectures
OUT offers real time online lectures just as in any conventional university for all courses using video conference based on Zoom cloud meeting application, you are encouraged to observe a teaching time table provided and join the online classes. The zoom joining links will be accessed on your MOODLE account.

Recorded Online lectures
In this activity, lectures are recorded to video, audio or both then uploaded and made viewable on a MOODLE. The advantage is that, you may access

online lectures posted on your designated websites anywhere in the world, at any time you wish, as long as you have an internet connection, but you can also view offline using OUT mobile App.

Online discussion
Online discussion is a collaborative tool to facilitate communication and knowledge construction. You can view content and contribute to an online discussion any time or anywhere on your computer/tablet/smart phone with an internet connection or offline using OUT mobile App.

Online assignment
Online assessment as any kind of assessment is used primarily to measure cognitive abilities, demonstrating what has been learned after a particular educational event has occurred, such as the end of an instructional unit or chapter. Online assignment is used to determine if learning is happening, to what extent and if changes need to be made for improvement of teaching and learning for both students and instructors.

Online independent study
In ODL, it is assumed that, people have the potential to learn continuously in real time by interacting with their environment. Thus, OUT have created a self-directed learning environment for you to discover your own strategies for learning, sharing your knowledge and understanding. Therefore, this student-centred learning approach requires you to make your own decisions and do most of the work. You will find the interactive learning material on your MOODLE account.

Field/practical/laboratory/research work
 Practical work which includes activities such as teaching practice, science practical, field work, research, project work etc is an integral part of most programs offered by OUT. The practical work will allow you to learn through direct implementation of your future professional role in real workplace settings. It prepares you for meaningful and productive participation in industry, the workforce and the community.

Face to face sessions
Face-to-face learning is an instructional method where course content and learning material are taught in person to the students, this teaching approach is common in convectional universities. However, at OUT, being a distance learning institution, this teaching method has been mostly replaced by real time online lectures and real time online seminars which allows for a live

interaction between a learner and an instructor, a student can get a lecture anywhere in the world. Nevertheless, in some programs few face to face sessions have been retained particularly for non-degree programs.

2.2 Units, teaching practice and micro teaching

2.2.1 Units

- Each programme has a required number of units for the student to qualify for graduation. The number of units assigned to a course indicates the study time associated with that course in a year.
- The contents of the units constitute the basic information that you must know, and therefore it should be studied systematically, lecture by lecture. The lectures are divided into six areas of knowledge.
- The main purpose of dividing the lectures into six knowledge areas is to help you understand the subject more easily.
- Each lecture includes some activities. The activities normally involve presenting you with a problem or a question to respond to, and where possible, answers or suggested answers are given for self-testing.
- It is necessary to work through the question thoroughly before checking on the solutions or answers. It is also recommended that you discuss your responses with your colleagues or the field lecturer.
- In case of challenges in understanding the subject, you may interact with a lecturer in question through Moodle platform or during the real-time lectures conducted through the online teleconference software known as Zoom.

2.2.2 Practical

- All students studying science programmes are required to attend science practical in specialized laboratories which include OUT kinondoni, Sokoine University and University of Dar es salaam.

2.2.3 Teaching practice

- All students studying Bachelor of Science with education programme are required to attend teaching practice for period of 4 weeks as provided in the almanac.

2.2.4 Attendance

- Students are required to attend orientation, all scheduled zoom classes, teaching practice and science practicals.

2.3   Examinations and Assessments
- Examinations are administered by the Directorate of Examination Syndicate (DES)
- Students enrolled on an undergraduate degree programme are assessed by coursework and examinations.
- The course work includes online Moodle assignments and the Main Test, both constituting 30% of the marks.
- The Annual Examination done at the end of the academic year carries 70% of the marks.
- students who fail to sit for the annual examination shall be eligible to sit for the special examination or on-demand examination depending on the timetable issued by the DES
- Students should sit for all registered main tests and examinations.

2.4   Eligibility to Sit for Main Test and Annual Examinations
- A student must pay the required tuition and examination fees.
- Must register for the examination four (4) weeks before the commencement of examination sessions.
- The student shall use the SARIS account to register for the examination.
- Only students registered for examinations shall be permitted to sit for the main test and the annual examination of the registered courses.
- Students are required to sit for examinations at the centres where they registered. In case of any emergency, the student may sit for the examination at any nearest OUT centre provided that he/she has a student ID and a hall ticket for the registered examinations.

2.5   Supplementary and Repeat of Examinations
- A student who fails to obtain a pass mark of 40% for both coursework and annual examination shall be required to sit for the supplementary examination.
- A student who fails to clear the supplementary examination will be required to repeat the course by doing both the main test and the annual examination.
- A student repeating the examination is required to pay a new tuition and examination fee for that particular course.

2.6   Examination Regulations

- Students are not allowed to sit for an examination if they have not registered for the examination in question or completed the proper course, or have not settled any fees due to the university.
- Students should read the examination timetable carefully and take note of the dates, times and venues of examinations.
- Students should arrive at the examination venue at least 30 minutes before the scheduled time of the examination. Once they enter the examination venue, they should sit according to the seating plan provided.
- Students will not be allowed to enter the examination venue after the first 30 minutes of the examination.
- Students are not allowed to leave the examination venue after they enter the examination venue during the first 30 minutes after the examination has started (except with the permission of the Chief Invigilator).
- Students should bring their Student ID Card and hall ticket and put them at the top right-hand corner of the desk throughout the examination. Students without any such identification may not be allowed to sit for the examination.
- Before entering the examination venue, students should make sure that unauthorized articles/items (e.g. books, manuscripts, notes, paper and all kinds of electronic/communication devices such as mobile phones, iPod, MP3 players, electronic dictionaries, databank watches) are taken out from their pockets and placed inside their bags. Mobile phones/electronic devices must be turned off.
- Once they have entered the examination venue, students should place their bags at a place directed by the Chief Invigilator.
- Students must not turn over the pages of the examination question paper and must not start working until they are instructed to do so.
- Students should remain silent once they enter the examination venue. They must not talk to each other or disturb other students. If they have questions, they should put up their hands and wait patiently for an invigilator.
- Students who wish to leave the examination venue temporarily during an examination session should only leave with the invigilator's permission.
- Before a student leaves a venue, the invigilator has the right to check whether the student has placed any unauthorized articles/items in his/her pocket(s).

- Students who have completed their examination and wish to leave the venue early during an examination session should submit their booklet to the chief invigilator and sign the examination attendance and the master list.
- A student who is found to have committed an act of academic dishonesty such as plagiarism, submission of material(s) for assessment which is not the student's own work, the use of fabricated or copied data shall receive zero marks for the course. In addition, the case will be submitted to the examination irregularity Committee for further action.
- Students found to have committed academic dishonesty may be suspended or discontinued from studies at the OUT. (see prospectus)
- Students have the sole responsibility to ensure that the examination regulations are observed and complied with. Students who are found to have breached any of the examination regulations will be subject to penalty or disqualification.

2.7 Assessment Grading System
- Letter grades are used to indicate the results of assessments. The number of grade points gained by a student in a particular course corresponds to the letter grade.
- Grade A (i.e. A) indicates that a student has an excellent performance in all Intended Learning Outcomes (ILOs) and a thorough mastery of the subject matter.
- Grade B (i.e. B+ and B) indicates that a student has a good performance in all ILOs and is competent in knowledge of the subject matter, or the student has an excellent performance in the majority of the ILOs and is competent in knowledge of the subject matter.
- Grade C (i.e. C) indicates that a student has a satisfactory performance in all ILOs and an acceptable level of knowledge of the course;
- Grade D indicates that a student has a satisfactory but does not allow him/her to proceed to more advanced work in the subject area.
- Grade E indicates unsatisfactory performance in the majority of the ILOs.
- Grade F indicates total fail.

2.8 Grade Point Average (GPA)

- The Grade Point Average (GPA) is an important indicator of the academic standing of a student. It is obtained by adding all the grade points gained and dividing the sum by the number of attempted units.
- Students must obtain a passing grade in all courses required in the programme.
- **Grading system for Diploma and certificates approved by NACTE**

NACTE Grading System for Certificate & Diploma				
NACTE NTA Level	**Score Range**	**Grade**	**Grade Point**	**Definition**
NTA Level 4 & NTA Level 5	80-100	A	4	Excellent
	65-79	B	3	Good
	50-64	C	2	Pass
	40-49	D	1	Poor
	0-39	F	0	Failure
	-	I	0	Incomplete
	-	Q	0	Disqualification
NTA Level 6	75-100	A	5	Excellent
	65-74	B+	4	Very Good
	55-64	B	3	Good
	45-54	C	2	Average
	35-44	D	1	Poor
	0-34	F	0	Failure
	-	Q	0	Disqualification

- **Grading system for Diploma and Certificates approved by TCU**

TCU Grading System for Certificate & Diploma					
Marks (%)	80-100	65-79	50-64	40-49	0-39
Letter Grade	A	B	C	D	E
Grade Points	4.0-5.0	3.0-3.9	2.0-2.9	1.0-1.9	0-0.9
Remarks	Excellent	Good	Satisfactory	Poor	Failure

- **Grading system for Bachelor Degree progrmmes approved by TCU**

Marks(%)	70-100	60-69	50-59	40-49	35-39	0-34
Letter Grade	A	B+	B	C	D	E
Grade Points	5	4	3	2	1	0
Remarks	Excellent	Very Good				

2.9   Academic Results
- Students' academic results are officially posted to students; SARIS accounts immediately after the marking is complete. Hence, candidates can promptly access their results through SARIS accounts.
- Students should report any missing or inaccuracy or inconsistency in the academic records immediately after the release of the results.
- The request for missing results should be made by email to the head of departments through directors of regional centres for easy follow up.

2.10   Course Exemption
Students who graduated from the OUT-foundation programme and selected to study a degree programme at the OUT are exempted from taking OCP 100 and OFP 017. The grades obtained from OFP shall be automatically transferred to the degree programme.

Students who prefer instead to register for the undergraduate courses OFC 017 and OCP 100 should do online course registration and pay the required tuition and examination fees as prescribed in the SARIS invoice printout.

2.11   Graduation Requirements
Students are approved for graduation by the Senate after fulfilling all the graduation requirements stipulated by the university. These requirements include general university requirements, programme requirements, and unit and grade point average requirements.

3.0   STUDENT SUPPORT SERVICES
3.1   OUT Regional Resource Centers
- Regional centres form a component of the administrative structure of The Open University of Tanzania. They are located in all regions of Tanzania, Mainland and Zanzibar.
- Roles of the regional centres include, but are not limited to, administrative activities such as application processes, issuing admission letters, registration, organizing orientation, examination venues, examination invigilation, tutoring and counselling, providing teaching and learning facilities, organizing public lectures, discussion groups, workshops and seminars and disseminating information about The Open University of Tanzania programmes.

3.2 Institute of Education Information Management and Technology (IEMT)

- The IEMT is the primary information technology provider for the OUT. Services provided by the IEMT include the maintenance of the University's Information technology network and website, email services, installation of hardware and software, supporting faculties and departments to maintain and use ICT equipment, maintaining an e-learning management system in enhancing academic activities, supervision of admission and registration system.
- The HQ and all regional centres are connected with free internet to facilitate teaching and learning activities.
- The IEMT conducts tailor-made training for students to improve ICT skills.
- All students are required to have IT gadgets such as smartphones and laptops.

3.3 Supplementary Reading Materials

In addition to the study units and essential reading texts, important books are recommended to students in each area of study. This enables students to see alternative views on the subject or to reinforce the information presented in the study units. Your attention should be drawn to the updates in materials and information.

3.3.1 Library Facilities

- OUT Library Services comprises the main library at the head office at Kinondoni Dar es Salaam and mini-libraries in the regional centres
- The library is a place for study and provides reading materials in both hard and soft copies to supplement your study materials.
- Membership and access to library services is open to all undergraduate students
- Library open from Monday to Friday; from 08.45 a.m. to 9.00 p.m. Saturday 10.00 a.m. to 9.00 p.m. and Sundays and Public Holidays 10.00 a.m. to 2.00 for main library. For regional centres mini library, the time is 8.00 am to 4.00 pm.
- Services offered at the library include; - e-library services, information literacy training, reading and studying facilities, leading books and other documents, reference services, newspapers and internet services.

- More details on how to accesses materials are provided in the Directorate speech.

3.3.2 Information Service
- The university almanack lists all academic events and their schedules.
- Examination time table
- Real-time zoom lectures timetable
- Client service charter

3.4 Students with special needs
- The OUT has a special unit for helping students with special needs. The unit is located at the head office, Kinondoni. Dar es salaam.
- The services offered include ICT literacy training, whereby students with special needs are facilitated to access study materials and communicate with each other
- At the regional centres, OUT staff provide special services to special needs students

4.0 PROGRAMMES ON OFFER AND FEE STRUCTURE
4.1 Faculty of Science Technology and Environment Studies

S/N	PGRM	UNITS	FEE	S/N	PRGM	UNITS	FEE
1	BSc ICT	40	2,540,000	6	DIT		**2,440,000**
2	BSc.Ed	40	2,870,000	7	CIT		
3	BSc ES	38	2,670,000	8	DPPH		
4	BSc general	38	2670,000	9	CPPH		
5	BSc DM	40	2,670,000	10			

5.0 KEY ACTIVITIES CALENDAR
5.1 Teaching Time Table for Undergraduate Students

THE OPEN UNIVERSITY OF TANZANIA
OFFICE OF DEPUTY VICE CHANCELLOR (ARC)
UNIVERSITY TEACHING AND LEARNING SERVICES UNIT

TEACHING AND EXAMINATIONS CALENDER FOR 2022/23 ACADEMIC YEAR

NOVEMBER 2022
Orientation for All Students
Begins:	Saturday	05 November 2022
Ends:	Sunday	06 November 2022

Registration For New and Continuing Students for 2022/23 Academic Year
Begins:	Tuesday	01 November2022
Ends:	Wednesday	30 November 2022

Real Time Online Lectures For Knowledge Area One (KA1) – Undergraduate and Non- Degree Students
Begins:	Monday	14 November 2022
Ends:	Wednesday	23 November 2022

DECEMBER 2022
Real Time Online Lectures For Knowledge Area Two (KA2) – Undergraduate and Non Degree Students
Begins:	Thursday	01 December 2022
Ends:	Tuesday	13 December 2022

Orientation for Postgraduate Students
Begins:	Thursday	01 December 2022
Ends:	Thursday	08 December 2022

Trimester One Real Time Online Lectures for Knowledge Areas One and Two (KA1&2 - Masters Students
Begins:	Wednesday	14 December 2022
Ends:-	Monday	19 December 2022

Trimester One Real Time Online Lectures for Knowledge Areas Three and Four (KA 3&4) – Masters Students
Begins:	Tuesday	27 December 2022
Ends:-	Friday	30 December 2022

Intesive Face To Face Sessions for DPTE Program
Begins:	Wednesday	14 December 2022
Ends:	Friday	23 December 2022

Main Timed Test for DPTE Program
Begins:	Tuesday	27 December 2022
Ends:	Friday	30 December 2022

JANUARY 2023
Examination Registration for February Session
Begins:	Monday	02 January 2023
Ends:	Wednesday	25 January 2023

Real Time Online Lectures for Knowledge Area Three (KA3)– Undergraduate and Non Degree Students
Begins:	Monday	02 January 2023
Ends:	Friday	13 January 2023

Trimester One Real Time Online Lectures For Knowledge Areas Five and Six (KA5& 6) – Masters Students
Begins:	Monday	16 January 2023
Ends:	Thursday	19 January 2023

Trimester One Face To Face Sessions for Masters Students
Begins:	Monday	23 January 2023
Ends:	Wednesday	25 January 2023

Intesive Face To Face Sessions for Foundation Program
Begins:	Monday	16 January 2023
Ends:	Friday	27 Janury 2023

Main Timed Test for All Students
Begins:	Monday	30 January 2023
Ends:	Tuesday	07 February 2023

Faculty of Business Managment Field Practical
Begins:	Monday	16 January 2023
Ends:	Friday	28 April 2023

FEBRUARY 2023
Trimester One Final Examination - Masters Students
Begins:	Wednesday	08 February 2023
Ends:	Friday	17 February 2023

Special and Supplimentary Examinations for All Students
Begins:	Wednesday	08 February 2023
Ends:	Friday	17 February 2022

Teaching Practice
Begins:	Monday	20 February 2023
Ends:	Friday	31 March 2023

Online Coursework Assessment
Begins:	Monday	27 February 2023
Ends:	Friday	10 March 2023

MARCH 2023
Real Time Online Lectures for Knowledge Area Four (KA4) – Undergraduate and Non Degree Students
Begins:	Monday	06 March 2023
Ends:	Wednesday	15 March 2023

Trimester Two Real Time Online Lectures for Knowledge Areas One and Two (KA1& 2) – Masters Students
Begins: Thursday 16 March 2023
Ends: Tuesday 21 March 2023

Trimester Two Real Time Online Lectures for Knowledge Areas Three and Four (KA 3&4) – Masters Students
Begins: Wednesday 22 March 2023
Ends: Monday 27 March 2023

APRIL 2023
Examination Registration for June Session
Begins: Monday 10 April 2023
Ends: Wednesday 19 May 2023

Real Time Online Lectures for Knowledge Area Five (KA5) - Undergraduate and Non Degree Students
Begins: Monday 03 April 2023
Ends: Wednesday 12 April 2023

Trimester Two Real Time Online Lectures for Knowledge Areas Five and Six (KA5& 6) – Masters Students
Begins: Thursday 13 April 2023
Ends: Tueday 18 April 2023

Field Practicals
(Geography, Sociology, Social Work, Journalism, Tourism, Political Science, Food Science and Nutrition)
Begins: Monday 03 April 2023
Ends: Friday 28 April 2023

MAY 2023
Real Time Online Lectures For Knowledge Area Six (KA 6) - Undergraduate and Non-Degree Students
Begins: Tuesday 02 May 2023
Ends: Thursday 11 May 2023

Trimester Two Face To Face Sessions for Masters Students
Begins: Monday 15 May 2023
Ends: Wednesday 17 May 2023

JUNE 2023
Special Main Timed Tests for All Students
Begins: Monday 29 May 2023
Ends: Tuesday 06 June 2023

Final Examinations for Undergraduate and Non-Degree Students
Begins: Wednesday 07 June 2023
Ends: Friday 16 June 2023

Trimester Two Final Examinations for Masters Students
Begins: Wednesday 07 June 2023
Ends: Friday 16 June 2023

JULY 2023
Trimester Three Real Time Online Lectures for Knowledge Areas One and Two (KA1& 2) – Masters Students
Begins: Monday 03 July 2023
Ends: Thursday 06 July 2023

Trimester Three Real Time Online Lectures for Knowledge Areas Three and Four (KA 3&4) Masters Students
Begins: Monday 10 July 2023
Ends: Thursday 13 July 2023

AUGUST 2023
Examination Registration for September Session
Begins: Tueday 01 August 2023
Ends: Thurssday 31 August 2023

Trimester Three Real Time Online Lectures for Knowledge Areas Five And Six (KA 5& 6) – Masters Students
Begins: Tuesda 01 August 2023
Ends: Friday 04 August 2023

Trimester Three Face To Face Sessions – Masters Students
Begins: Monday 14 August 2023
Ends: Wednesday 16 August 2023

Science Practicals
Begins: Tuesday 01 August 2023
Ends: Thursday 31 August 2023

SEPTEMBER 2023
Special Main Timed Test for All Students
Begins: Monday 04 September 2023
Ends: Tuesday 12 September 2023

Trimester Three Final Examination - Masters Students
Begins: Wednesday 13 September 2023
Ends: Friday 23 September 2023

Special and Supplimentary Examinations for All Students
Begins: Wednesday 13 September 2023
Ends: Friday 22 September 2023

OCTOBER 2023
Oral Examinations for LLB Students
Begins: Monday 09 October 2023
Ends: Friday 27 October 2023

NOTICE
1. During each Knowledge area, teaching and learning activities will also involve online discussion, online seminar, online assignment, online independent study, online moot court etc as guided by the respective course instructors

2. Other face to face sessions where necessary shall be organized by the respective teaching units.

Issued by
The University Teaching and Learning
Services Unit (UTLS)

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6.0   PROGRAMMES
6.1   Faculty of Science Technology and Environment Studies
6.1.1   B.Sc. in Information and Communication Technology (B.Sc. ICT)

Level One

Course Code	Course Name	Mode of Delivery		Number of Units
		Lecture hours	Practical hours	
OIT 111	Fundamentals of Information Systems	18	35	1
OIT 112	Computer Mathematics I	35	-	1
OIT 113	Probability and Statistics	35	-	1
OIT 114	Communication Skills for IT	35	-	1
OIT 115	Introduction to Computer Architecture	35	70	2
OIT 116	Programming in C	35	70	2
OIT 117	Data Communications and Networking, I	18	35	1
OIT 118	Industrial Training, I			
OIT 119	Web Design and Development	35	70	2
Total		**246**	**280**	**11**

Level Two

Course Code	Course Name	Mode of Delivery		Number of Units
		Lecture hours	Practical hours	
OIT 211	Operating Systems	35	70	2
OIT 212	Software Design and Development	35	70	2
OIT 213	Computer mathematics II	35	-	1
OIT 214	Object Oriented Programming with Java	35	70	2
OIT 215	Data Communication and Networking II	35	70	2
OIT 216	Introduction to Computer Security	18	35	1
OIT 217	Database Concepts and Design	18	35	1
OIT 218	Web Programming	35	70	2
OIT 219	Industrial Training II		120	
Total		**246**	**540**	**13**

Level Three

Course Code	Course Name	Mode of Delivery		Number of Units
		Equivalent Lecture hours	Practical hours	
OIT 311	Information Systems Security Management	18	35	1
OIT 312	Information Systems Planning and Management	18	35	1
OIT 313	Network Design and Administration	18	35	2
OIT 314	Computer Ethics and Social Cultural Implication	35	-	1
OIT 315	Wireless Networks	35	70	2
OIT 316	Final Year Project		180	3
OIT 317	Database Implementation and Administration	18	35	2
	Total	**124**	**355**	**12**

Elective courses

Course Code	Course Name	Mode of Delivery		Number of Units
		Lecture hours	Practical hours	
OIT 220	Introduction to e-Business	30	30	1
OIT 221	Multimedia Technologies and Applications	30	30	2
OIT 318	Introduction to Computer Graphics	30	60	2
OIT 319	Programming in C++	30	60	2
	Total	**120**	**180**	**7**

6.1.2 B.SC. In Data Management (B.SC. DM)

Level of study		Course code	No of credits
Level 1			
1.	Fundamentals of Information Systems	OIT 131	10
2.	Discreet Mathematics with Applications	OIT 132	10
3.	Probability and Statistics	OIT 133	10
4.	Communication Skills for IT	OIT 134	10
5.	Data Structures and Algorithm	ODM 108	20
6.	Introduction to Computer Programming Languages	ODM 103	10
7.	Data Governance in Organizations	ODM 105	10
8.	Database Design and Implementation	OIT 138	20
9.	Operating Systems	OIT 231	10
10.	Industrial Training 1	OIT 139	20
Level 2			
11.	Graphics Processing & Human Computer Interaction	ODM 201	10
12.	Enterprise Resource Planning (ERP) Systems	ODM 204	20

13.	Research Methods & Data Analysis	ODM 206	20
14.	Fundamentals of GIS	ODM 207	10
15.	Cross cutting issues	ODM 209	10
16.	E-Commerce and Entrepreneurship	ODM 211	10
17.	Data Mining Techniques and Application	ODM 212	20
18.	Data Communications and Networking	OIT 137	10
19.	Inventory Models and Queuing Theory	OIT 233	10
20.	Industrial Training II	OIT 238	20
Level 3			
21.	Multimedia Technologies	ODM 301	10
22.	Data Security	ODM 308	20
23.	Computer Ethics and Social Cultural Implication	OIT 333	10
24.	Final Year Project	OIT 334	30
Elective Courses			
25.	Education Data Management and Digital Libraries	ODM 304	20
26.	Health Data Management	ODM 305	20
27.	Data in Agriculture Systems	ODM 306	20
28.	Financial Data Management	ODM 307	20
29.	Environment Data Management	ODM 309	20
Total			440

6.1.3 B.Sc. Environmental Studies (Management)

SN	Code	Course Title	Units	Credits	Status	Course Tutor Email
LEVEL I						
1	OCP 100	Computer Application in Environmental Studies	1	10	Core	said.ally@out.ac.tz
2	OFP 017	Communication Skills	1	10	Core	ancifrida.prosper@out.ac.tz
3	OEV 101	Principles of Ecology	2	10	Core	shelard.mukama@out.ac.tz
4	OEV 112	Environmental Management, Ethics and Philosophy	3	30	Core	josephat.saria@out.ac.tz
5	OEV 114	Land Use and Urban System Management	3	30	Core	emanuel.mhache@out.ac.tz&bernard.baraka@out.ac.tz
6	OEV 116	Environmental Education and Communication	2	20	Core	irene.tarimo@out.ac.tz&bernard.baraka@out.ac.tz
Total Units			**12**	**120**		

		LEVEL II				
7	OEV 201	Applied Statistics and Research Methods	2	20	Core	lawi.yahana@out.ac.tz

8	OEV 219	Natural Resources Management	3	30	Core	james.kisoza@out.ac.tz
9	OEV 218	Environmental Pollution and Waste Management	3	30	Core	grace.maseta@out.ac.tz
10	OEV 210	Environmental Economics	2	20	Core	elna.lyamuya@out.ac.tz
11	OEV 209	Introduction to Remote Sensing and GIS	2	20	Core	pamela.semiono@out.ac.tz
Total Units			**12**	**120**		
LEVEL III						
12	OEV 301	Environmental Impact Assessment	2	20	Core	lawi.yohana@out.ac.tz
13	OEV 316	Environmental Policy and Law	2	20	Core	msafiri.mabera@out.ac.tz
14	OEV 318	Environmental Resources & Development	2	20	Core	hassan.mateka@out.ac.tz
15	OEV 321	Environmental Field Project	2	20	Core	irene.tarimo@out.ac.tz
Total Units			**8**	**80**		

6.1.4 B.Sc. Environmental Studies (Science)

S/N	Code	Course Title	Units	Credits	Status	Course Tutor Emails
LEVEL I						
1	OCP 100	Computer Application In Environmental Studies	1	10	Core	said.ally@out.ac.tz
2	OFP 017	Communication Skills	1	10	Core	ancifrida.prosper@out.ac.tz
3	OEV 101	Ecology	2	20	Core	shelard.mukama@out.ac.tz
4	OEV 113	Environmental Science	3	30	Core	shaban.mbogo@out.ac.tz
5	OEV 107	General Biology	2	20	Core	peacebenedicta@out.ac.tz
6	OEV 115A	Environmental Science Practicals	1	10	Core	james.mutasingwa@out.ac.tz&irene.tarimo@out.ac.tz
Total Units			**11**	**110**		
LEVEL II						
7	OEV 217	Environmental Analytical Methods	2	20	Core	joel.mihale@out.ac.tz
8	OEV 201	Applied Statistics and Research Methods	2	20	Core	lawi.yahana@out.ac.tz
9	OEV 219	Natural Resources Management	3	30	Core	james.kisoza@out.ac.tz

10	OEV 218	Environmental Pollution and Waste Management	3	30	Core	grace.maseta@out.ac.tz
11	OEV 209	Introduction to Remote Sensing and GIS	2	20	Core	pamela.semiono@out.ac.tz&nangware.msofe@out.ac.tz
12	OEV 115B	Environmental Science Practicals	1	10	Core	james.mutasingwa@out.ac.tz&irene.tarimo@out.ac.tz
Total Units			**12**	**120**		
		LEVEL III				
12	OEV 301	Environmental Impact Assessment	2	20	Core	lawi.yahana@out.ac.tz
13	OEV 316	Environmental Policy and Law	2	20	Core	msafiri.mabera@out.ac.tz
14	OEV 317	Water Resources Management	2	20	Core	isabela.thomas@out.ac.tz(irene.tarimo@out.ac.tz
15	OEV 321	Environmental Field Project	2	20	Core	irene.tarimo@out.ac.tz
Total Units			**8**	**80**		

OPTION / ELECTIVE COURSES

S/N	Code	Course Title	Units	Credits	Status	Course Tutor Emails
		LEVEL II				
1	OEV 220	Environmental Geology, Hazards & Risk assessment	3	30	Elective	pamela.semiono@out.ac.tz
2	OEV 221	Aquatic Science and Limnology	3	30	Elective	hassan.mateka@out.ac.tz
		LEVEL III				
3	OEV 319	Environmental Sociology and Gender Issues	3	30	Elective	irene.tarimo@out.ac.tz
4	OEV 320*	Environmental Modelling	3	30	Electives	irene.tarimo@out.ac.tz

*Not on offer

6.1.5   BACHELOR OF SCIENCE (B.Sc.) GENERAL
6.1.5.1   CLUSTERS FOR MAJOR IN MATHEMATICS

Code & Name	Units	Status
LEVEL I CLUSTERS		
OFC 017: Communication Skills	**1**	**Core**
OCP 100: Introduction to Microcomputer Studies	**1**	**Core**
OMT 151: Mathematical Analysis I & II	**2**	Core
OMT 152: Linear Algebra I & II	**2**	Core
OMT 153: Probability and Statistics I & II	**2**	Core
OMT 154: Informatics & Programming Languages	**2**	Core
LEVEL II CLUSTERS		

OMT 203: Advanced Calculus	1	Core
OMT 205: Differential Equations	1	Core
OMT 251; Methods & Partial Differential Equations	2	Elective
OMT 252: Numerical Analysis I & II	2	Elective
OMT 225: Applied Vector Theory	1	Elective
OMT 255: Real Analysis I & II	2	Core
LEVEL III CLUSTERS		
OMT 324: Complex Analysis	1	Core
OMT 351: Abstract Algebra I & II	3	Elective

6.1.5.2   CLUSTERS FOR MINOR IN MATHEMATICS

Code & Name	Units	Status
LEVEL I		
OMT 151: Mathematical Analysis I & II	2	Core
OMT 152: Linear Algebra I & II	2	Core
OMT 153: Probability and Statistics I & II	2	Core
OMT 154: Informatics & Programming Languages	2	Core
LEVEL II		
OMT 205: Differential Equations	1	Core
OMT 252: Numerical Analysis I & II	2	Elective
OMT 225: Applied Vector Theory	1	Elective
LEVEL III CLUSTERS		
OMT 324: Complex Analysis	1	Core

6.1.5.3   CLUSTERS FOR DOUBLE MAJOR IN MATHEMATICS

Code & Name	Units	Status
LEVEL I		
OFC 017: Communication Skills	1	**Core**
OCP 100: Introduction to Microcomputer Studies	1	**Core**
OMT 151: Mathematical Analysis I & II	2	Core
OMT 152: Linear Algebra I & II	2	Core
OMT 153: Probability and Statistics I & II	2	Core
OMT 154: Informatics & Programming Languages	2	Core
LEVEL II		
OMT 203: Advanced Calculus	1	Core
OMT 205: Differential Equations	1	Core
OMT 251; Methods & Partial Differential Equations	2	Elective*
OMT 252: Numerical Analysis I & II	2	Elective*
OMT 253: Survey and Quality Control	2	Elective*
OMT 209 Fluid Mechanics I	1	Core
OMT 216: Operational Research I	1	Elective*
OMT 217: Number Theory I	1	Core
OMT 225: Applied Vector Theory	1	Elective*
OMT 255: Real Analysis I & II	2	Core
OMT 254: Advanced Statistics, Design and Analysis of Experiment	2	Elective*
LEVEL III		
OMT 303: Measure Theory	1	Core

Code & Name	Units	Status
OMT 304: Differential Geometry	**1**	Elective*
OMT 305: Topology I	**1**	Core
OMT 352: Test of Hypothesis & Theory of Estimation	**2**	Elective*
OMT 324: Complex Analysis	**1**	Core
OMT 351: Abstract Algebra I & II	**3**	Elective*

PHYSICS
6.1.5.4   CLUSTERS OF PHYSICS MAJOR COURSES

Code & Name	Units	Status
LEVEL I		
OFC 017: Communication Skills	1	Core
OCP 100: Introduction To Microcomputer Studies	1	Core
OPH 151: Introductory University Physics	3	Core
OPH 152: Electromagnetism I & II	2	Core
LEVEL II CLUSTERS		
OPH 251: Mathematical Physics	2	Core
OPH 252: Optics	2	Core
OPH 208: Thermal Physics II	1	Core
LEVEL III CLUSTERS		
OPH 351: Physics of the Atom	2	Core
OPH 352: Quantum Theory of Solids	2	Core
OPH 411: Applied Earth Physics	3	Elective
OPH 441: Analog Electronics	2	Core
OPH 442: Digital Electronics	2	Elective
OPH 443: Microelectronics	2	Elective
OPH 350: Physics Practicals	1	Core
OPH 305: Physics Special Project	1	Core

6.1.5.5   CLUSTERS OF PHYSICS MINOR COURSES

Code & Name	Units	Status
LEVEL I		
OPH 151: Introductory University Physics	**3**	**Core**
OPH 152: Electromagnetism I & II	**2**	**Core**
OPH 251: Mathematical Physics	**2**	**Elective**
LEVEL II		
OPH 252: Optics	**2**	**Core**
OPH 208: Thermal Physics II	**1**	**Elective**
OPH 351: Physics of the Atom	**2**	**Core**
LEVEL III		
OPH 352: Quantum Theory of Solids	**2**	**Elective**
OPH 411: Applied Earth Physics	**3**	**Elective**
OPH 441: Analog Electronics	**2**	**Core**
OPH 442: Digital Electronics	**2**	**Elective**
OPH 443: Microelectronics	**2**	**Elective**
OPH 350: Physics Practicals	**1**	**Core**

CHEMISTRY

6.1.5.6   CLUSTERS FOR CHEMISTRY MAJOR

Code & Name	Units	Status
LEVEL I		
OFC 017: Communication Skills	1	Core
OCP 100: Introduction To Microcomputer Studies	1	Core
OCH 151: General and Physical Chemistry	2	Core
OCH 152: Organic Chemistry	2	Core
OCH 104: Systematic Inorganic Chemistry	1	Core
OCH 105: Chemical Thermodynamics	1	Core
LEVEL II		
OCH 251: Organic Spectroscopy	2	Elective
OCH 252: Organic Reaction Mechanism	2	Core
OCH 253: Advanced Inorganic Chemistry	3	Core
OCH 206: Chemical Bonding	1	Core
OCH 254: Analytical Chemistry	2	Core
OCH 255: Natural Products & Carbohydrates Chemistry	2	Elective
LEVEL III		
OCH 351: Chemical Kinetics & Electrochemistry	2	Core
OCH 303: Industrial Organic Chemistry	1	Elective
OCH 309: Theoretical Chemistry	1	Elective
OCH 350: CHEMISTRY PRACTICALS	1	Core
OCH 307: CHEMISTRY SPECIAL PROJECT	1	Core

6.1.5.7   CLUSTERS FOR CHEMISTRY MINOR

Code & Name	Units	Status
LEVEL I		
OCH 151: General and Physical Chemistry	2	Core
OCH 152: Organic Chemistry	2	Core
OCH 104: Systematic Inorganic Chemistry	1	Core
OCH 105: Chemical Thermodynamics	1	Core
LEVEL II		
OCH 251: Organic Spectroscopy	2	Elective
OCH 252: Organic Reaction Mechanism	2	Elective
OCH 253: Advanced Inorganic Chemistry	3	Elective
OCH 206: Chemical Bonding	1	Core
OCH 254: Analytical Chemistry	2	Core
OCH 255: Natural Products & Carbohydrates chemistry	2	Elective
LEVEL III		
OCH 351: Chemical Kinetics & Electrochemistry	2	Core
OCH 303: Industrial Organic Chemistry	1	Elective
OCH 309: Theoretical Chemistry	1	Elective
OCH 350: Chemistry Practicals	1	Core

BIOLOGY
6.1.5.8   CLUSTERS FOR BIOLOGY MAJOR

Course Code & Name	Units	Status
LEVEL I		
OFC 017: Communication Skills	1	Core
OCP 100: Introduction to Microcomputer studies and information Technology I	1	Core
OBL 101: Biological Techniques	1	Elective
OBT 151: Diversity of Plants and Fungi	3	Core
OZL 151: Diversity of Animals	3	Core
OBL 151: Cell Biology	2	Core
OZL 152: Fundamentals of Physiology	3	Elective
OBL 251: Microbes & Microbial Genetics	2	Core
OBL 350A – Biology Practical	*	*
LEVEL II		
OBT 251: Plant Structure and Development	3	Elective
OBL 204: Soil Science	1	Core
OZL 205: Developmental Biology	1	Core
OZL 208: Immunology	1	Elective
OBT 252: Plant Biochemistry & Metabolism	2	Elective
OBL 202: Genetics	1	Elective
OZL 251: Aquatic & Estuarine Biology	3	Elective
OBL 301: Taxonomy	1	Core
OBL 350B – Biology Practical	*	*
LEVEL III		
OBL 302: Biostatistics	1	Core
OBT 351: Plant and Crop Physiology	2	Elective
OZL 351: Principles of Ecology	2	Core
OBL 306: Evolutionary Biology	1	Core
OBL 350C - Biology Practical	1	Core
OBL 314 – Biology Special Project	1	Core

6.1.5.9   CLUSTERS FOR BIOLOGY MINOR

Course Code & Name	Units	Status
LEVEL I		
OBL 101: Biological Techniques	1	Core
OBL 151: Cell Biology	2	Core
OZL 151: Diversity of Animals	3	Core
OZL 152: Fundamentals of Physiology	3	Elective
OBL 251: Microbes & Microbial Genetics	2	Elective
OBL 350A – Biology Practical	*	*
LEVEL II		
OBT 251: Plant Structure and Development	3	Elective
OBT 151: Diversity of Plants and Fungi	3	Core
OBL 204: Soil Science	1	Elective
OZL 205: Developmental Biology	1	Elective
OZL 208: Immunology	1	Elective
OBT 252: Plant Biochemistry & Metabolism	2	Elective

Course Code & Name		
OBL 202: Genetics	1	Core
OZL 251: Aquatic & Estuarine Biology	3	Elective
OBL 301: Taxonomy	1	Elective
OBL 350B – Biology Practical	*	*
LEVEL III		
OBL 302: Biostatistics	1	Core
OBT 351: Plant and Crop Physiology	2	Elective
OZL 351: Principles of Ecology	2	Elective
OBL 306: Evolutionary Biology	1	Elective
OBL 350C - Biology Practical	1	Core
OBL 314 – Biology Special Project	1	Core

BOTANY
6.1.5.10 CLUSTERS FOR BOTANY MAJOR

Course Code & Name	Units	Status
LEVEL I		
OFC 017: Communication Skills	**1**	Core
OCP 100: Introduction to Microcomputer studies and information Technology I	**1**	Core
OBL 101: Biological Techniques	**1**	Elective
OBT 151: Diversity of Plants and Fungi	**3**	Core
OBL 151: Cell Biology	**2**	Core
OBL 251: Microbes & Microbial Genetics	**2**	Elective
OBT 350A: Botany Practical	*	*
LEVEL II		
OBT 251: Plant Structure and Development	**3**	Core
OBT 252: Plant Biochemistry & Metabolism	**2**	Core
OBL 202: Genetics	**1**	Elective
OBL 204: Soil Science	**1**	Elective
OBL 301: Taxonomy	**1**	Core
OBT 350B: Botany Practical	*	*
LEVEL III		
OBT 351: Plant and Crop Physiology	**2**	Core
OZL 351: Principles of Ecology	**2**	Core
OBL 302: Biostatistics	**1**	Core
OBT 309: Plant Breeding	**1**	Elective
OBL 306: Evolutionary Biology	**1**	Elective
OBT 350C: Botany Practical	**1**	**Core**
OBT 306: Botany Special Project	**1**	**Core**

6.1.5.11 CLUSTERS FOR BOTANY MINOR

Course Code & Name	Units	Status
LEVEL I		
OBL 101: Biological Techniques	**1**	Elective
OBT 151: Diversity of Plants and Fungi	**3**	Core
OBL 151: Cell Biology	**2**	Elective
OBL 251: Microbes & Microbial Genetics	**2**	Elective
OBT 350A: Botany Practical	*	*

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LEVEL II		
OBT 251: Plant Structure and Development	**3**	Core
OBT 252: Plant Biochemistry & Metabolism	**2**	Elective
OBL 202: Genetics	**1**	Elective
OBL 204: Soil Science	**1**	Elective
OBL 301: Taxonomy	**1**	Core
OBT 350B: Botany Practical	*****	*****
LEVEL III		
OBT 351: Plant and Crop Physiology	**2**	Core
OZL 351: Principles of Ecology	**2**	Elective
OBL 302: Biostatistics	**1**	Core
OBT 309: Plant Breeding	**1**	Elective
OBL 306: Evolutionary Biology	**1**	Elective
OBT 350C - Botany Practical	**1**	**Core**
OBT 306: Botany Special Project	**1**	**Core**

ZOOLOGY
6.1.5.12 CLUSTERS FOR ZOOLOGY MAJOR

Course Code & Name	Units	Status
LEVEL I		
OFC 017: Communication Skills	**1**	Core
OCP 100: Introduction to Microcomputer studies and information Technology I	**1**	Core
OZL 151: Diversity of Animals	**3**	Core
OBL 101: Biological Techniques	**1**	Elective
OBL 151: Cell Biology	**2**	Core
OZL 152: Fundamentals of Physiology	**3**	Core
OBL 251: Microbes & Microbial Genetics	**2**	Core
OZL 350A: Zoology Practical	*****	*****
LEVEL II		
OBL 202: Genetics	**1**	Elective
OZL 205: Developmental Biology	**1**	Core
OZL 208: Immunology	**1**	Elective
OBL 301: Taxonomy	**1**	Core
OZL 251: Aquatic & Estuarine Biology	**3**	Elective
OZL 350B: Zoology Practical	*****	*****
LEVEL III		
OBL 302: Biostatistics	**1**	Core
OBL 306: Evolutionary Biology	**1**	Core
OZL 351: Principles of Ecology	**2**	Core
OZL 352: Entomology & Parasitology	**2**	Elective
OZL 310: Animal Behaviour	**1**	Elective
OZL 350C: Zoology Practical	**1**	**Core**
OZL 314: Zoology Special Project	**1**	**Core**

6.1.5.13 CLUSTERS FOR ZOOLOGY MINOR

Course Code & Name	Units	Status
LEVEL I		
OZL 151: Diversity of Animals	**3**	Core
OBL 101: Biological Techniques	**1**	Elective
OBL 151: Cell Biology	**2**	Core
OZL 152: Fundamentals of Physiology	**3**	Elective
OBL 251: Microbes & Microbial Genetics	**2**	Elective
OZL 350A: Zoology Practical		
LEVEL II		
OBL 202: Genetics	**1**	Core
OZL 205: Developmental Biology	**1**	Core
OZL 208: Immunology	**1**	Core
OBL 301: Taxonomy	**1**	Elective
OZL 251: Aquatic & Estuarine Biology	**3**	Elective
OZL 350B: Zoology Practical		
LEVEL III		
OBL 302: Biostatistics	**1**	Core
OBL 306: Evolutionary Biology	**1**	Core
OZL 351: Principles of Ecology	**2**	Elective
OZL 352: Entomology & Parasitology	**2**	Elective
OZL 310: Animal Behaviour	**1**	Elective
OZL 350: Zoology Practical	**1**	**Core**
OZL 314: Zoology Special Project	**1**	**Core**

HOME ECONOMICS
6.1.5.14 CLUSTERS OF DOUBLE MAJOR HOME ECONOMICS COURSES

Code & Name	Units	Status
LEVEL I		
OFC 017: Communications skills	1	**Core**
OCP 100: Introduction to Microcomputer Studies and Information Technology	1	Core
OHE 151: Biological Sciences for Home Economics	2	Core
OHE 152: Physical Science for Home Economics	2	Core
OHE 153: Clothing Construction	2	Core
OHE 154: Textile I & II	2	Elective
OHE 155: Foods & Nutrition	2	Core
OHE 156: Home Management	2	Core
LEVEL II		
OHE 115: Human Anatomy & Physiology	1	Core
OHE 251: Meal Planning & Institutional Catering	2	Core
OHE 252: Principles of Economics & Consumer Education	2	Elective
OHE 253: Household Equipment & Home Furnishing	3	Core
OHE 112: Food Science in the Home	1	Core
OHE 204: Community Health	1	Elective
OHE 254: Therapeutic Diet & Community Nutrition	2	Core
OHE 255: Child Development & Family Education	2	Elective

LEVEL III		
OHE 351: Rural Sociology & Gender Issues	2	Elective
OHE 352: Statistics & Research Methods for Home Economics	2	Core
OHE 353: Extension Education Methods.	2	Core
OHE 350: Home Economics Praticals	2	Core
OHE 307: Home Economics Special Project	1	Core

6.1.5.15 CLUSTERS OF SINGLE MAJOR HOME ECONOMICS COURSES

Code & Name	Units	Status
LEVEL I		
OHE 151: Biological Sciences for Home Economics	2	Core
OHE 154: Textile I & II	2	Elective
OHE 155: Foods & Nutrition	2	Core
OHE 156: Home Management	2	Core
LEVEL II		
OHE 112: Food Science in the Home	1	Core
OHE 251: Meal Planning & Institutional Catering	2	Core
OHE 254: Therapeutic Diet & Community Nutrition	2	Core
OHE 255: Child Development & Family Education	2	Core
LEVEL III		
OHE 352: Statistics & Research Methods for Home Economics	2	Core
OHE 352 Home Economics Practicals for Bed	1	Core

6.1.6 BACHELOR OF SCIENCE WITH EDUCATION
Programme Contents
6.1.6.1 EDUCATION COURSES FOR B.Sc. (ED.) STUDENTS

	Code	Course title	Core/Elective	Units
1	OEP 101	Educational Psychology	Core	2
2	OEF 101	Philosophy of Educational and Teaching	Core	2
3	OEF 102	History and Sociological Aspects in Education	Core NB: Elective for B.Sc (Ed)	2
4	OEI 101	Curriculum Development and Evaluation	Core	2
5	OEI 208 (A and B)	Teaching Practice	Core	2
6	OEI 201	Teaching Methods for Physical Sciences	Core	2
7	OEI 207	Teaching Methods for Mathematics	Core	2
8	OEI 206	Teaching method for Applied Sciences	Core	2
9	OEI 202	Teaching Methods for Life Sciences	Core	2
10	OEM 201	Educational Management and Leadership	core	2

Total the number of Education courses units for B.Sc. (Ed) is 12. Two Units will be taken for OCP 100 and OFC 017, Computer and Communication Skills respectively

6.1.6.2 CHEMISTRY COURSE STRUCTURE
LEVEL 1: CORE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OCH 111	Physical Chemistry	35		10
OCH 112	Inorganic Chemistry	35		10
OCH 113	Organic Chemistry	70		20
OCH 114*	Introductory Chemistry for Biology Students	35		10

You have to register to begin Chemistry Practicals

OCH 320	Chemistry Practicals

ELECTIVE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OCH 115	Aromaticity	35		10

NOT FOR CHEMISTRY MAJOR

Elective courses will be offered when available
LEVEL 2: CORE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OCH 211	Basic Analytical Chemistry	35		10
OCH 213	Advanced Inorganic Chemistry	105		30

Continue for further Chemistry Practicals

OCH 320	Chemistry Practicals

ELECTIVE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OCH 212	Organic Spectroscopy	70		20
OCH 214	Organic Reaction Mechanism	35		10
OCH 215	Chemical Thermodynamics	35		10
OCH 216	Organic Stereochemistry	35		10
OCH 217	Chemistry of Natural Products	35		10
OCH 218	Forensic Chemistry	35		10
OCH 219	Medicinal Chemistry	35		10

Elective courses will be offered when available

LEVEL 3: CORE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OCH 311	Chemical Kinetics & Electrochemistry	70		20
OCH 312	Instrumental Methods in Analytical Chemistry	35		10
OCH 320	Chemistry Practicals		70	10

ELECTIVE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OCH 313	Nuclear Chemistry	35		10
OCH 314	Industrial Organic Chemistry	35		10
OCH 315	Theoretical Chemistry	35		10
OCH 316	Industrial Inorganic Chemistry	35		10
OBL 215**	Biochemistry	35		10
OCH 317	Chemistry Research Project		70	10

Elective courses will be offered when available
NOTE: **This is will be taken from life science department

6.1.6.3   MATHEMATICS COURSE STRUCTURE
LEVEL 1: CORE COURSES

Code	course Title	Lecture Hours	Practical Hours	Total Credits
OMT 111	Mathematical Analysis	70		20
OMT 112	Linear Algebra I –	35		10
OMT 114	Probability and Statistics	70		20
OMT 115	Introduction to Mathematical Logic and Set Theory	35		10
Total		**210**		**60**

ELECTIVE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OMT 113	Linear Algebra II	35		10
OMT 116	History of Mathematics	35		10
Total		**70**		**20**

Elective courses will be offered when available

LEVEL 2: CORE COURSES

Code	course Title	Lecture Hours	Practical Hours	Total Credits
OMT 221	Numerical Methods	35		10
OMT 224	Ordinary Differential Equation	35		10
OMT 225	Applied Vector theory	35		10
OMT 228	Linear Programming	35		10

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OMT 230	Mathematical Programming with MATLAB	28	14	10
	Total	**164**	**14**	**50**

ELECTIVE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OMT 222	Numerical Analysis	35		10
OMT 223	Computer Programming	28	14	10
OMT 227	Real Analysis	70		20
OMT 229	Number Theory	35		10
OMT 231	Mathematical Methods	35		10
OMT 232	Advanced Calculus	35		10
OMT 233	Sample Survey and Quality Control	70		20
OMT 234	Advanced Statistics, Design and Analysis of Experiments	70		20
OMT 235	Discrete Mathematics	35		10
OMT 236	Fluid Mechanics	35		10
	Total	**476**	**14**	**130**

Elective courses will be offered when available

LEVEL 3: CORE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OMT 324	Complex Analysis	35		10
	Total	**35**		**10**

ELECTIVE COURSES

Code	course Title	Lecture Hours	Practical Hours	Total Credits
OMT 331	Topology	35		10
OMT 332	Partial Differential Equations	35		10
OMT 334	Abstract Algebra	70		20
OMT 335	Mathematics Project		70	10
OMT 336	Measure Theory	35		10
OMT 337	Differential Geometry	35		10
OMT 338	Functional Analysis	35		10
OMT 339	Integer and Non-Linear Programming	35		10
OMT 340	Theory of Estimation and Tests of Hypothesis	70		20
OMT 341	Networks and Transportation Problems	35		10
	Total	**385**	**70**	**120**

Elective courses will be offered when available

6.1.6.4 PHYSICS COURSES STRUCTURE

LEVEL 1: CORE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OFC 017	Communication skills	35		10
OCP 100	Computer Studies	35		10
OPH 111	Fundamental Physics	105		30
OPH 113	Mathematical Methods of Physics	70		20
OPH 320	Physics Practical		70	10
	Total	**145**	**70**	**80**

Remember to register Physics Practicals

OPH 320	Physics Practical

LEVEL 2: CORE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OPH 112	Electromagnetism I & II	70		20
OPH 216	Basic Electronics	35		10
	Total	**105**		**30**

Continue for further Physics Practicals

OPH 320	Physics Practical

ELECTIVE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OPH 211	Statistical Thermodynamics	70		20
OPH 213	Optics	70		20
OPH 214	Earth Physics	70		20
OPH 215	Analog Electronics	70		20
	Totals			**80**
		280		

Elective courses will be offered when available

LEVEL 3: CORE COURSES

Code	Course Title	Lecture Hours	Practical Hours	Total Credits
OPH 312	Physics of the atom	35		20
OPH 321	Physics Research Project		70	10
	Total	**35**	**70**	**30**

Continue for further Physics Practicals

OPH 320	Physics Practical

ELECTIVE COURSES

Code	course Title	Lecture Hours	Practical Hours	Total Credits
OPH 311	Fundamentals of Material Science	35		10
OPH 313	Quantum Theory of Solids	70		20
OPH 314	Digital Electronics	70		20
OPH 315	Microelectronics	70		20
OPH 323	Environmental Physics	70		20
Total		**315**		**90**

Elective courses will be offered when available

If a student does not do Research Project in Physics; he/she should do OPH 214 (Earth Physics) to meet the required 12 units.

NB: All science students must take one of the special projects from one teaching subject to complete the programme.

6.1.6.5 COURSES FOR INFORMATION AND COMPUTER STUDIES

Code	Course Title	Units
OIT 111	Fundamentals of Information Systems	1
OIT 117	Data Communications and Networking I	1
OIT 116	Algorithm and Programming in C	2
OIT 119	Web Design and Development	1
OIT 121	Application of Multimedia Technology in Learning	1
OIT 122	Introduction to Computer Ethics and Community Impacts	1
OIT 212	System Analysis and Design	2
OIT 217	Database Concepts and Design	1
OIT 220	Introduction to e-Business	1
OIT 314	Computer Ethics and Social Culture	1

6.1.6.6 COURSES FOR HOME ECONOMICS AND HUMAN NUTRITION

Course	LEVEL 1	Units
OHE 154	Textiles I & II	2
OHE 155	Food & Nutrition	2
	LEVEL 2	
OHE 156	Home Management	2
OHE 112	Food Science in the Home	1
	LEVEL 3	
OHE 254	Therapeutic Diet & Community Nutrition	2
OHE 350	H/Economics & H/Nutrition Practicals	2
OHE 307	Special Project	1

Please Note: Science education students are required to register in all courses indicated for respective subject specializations.

6.1.6.7 BIOLOGY COURSES STTRUCTURE

Level I - Core Courses

Course Code	Course Title	Units	Practical Hours	Lecture Hours
OBL 111	Biological Laboratory Techniques	1		35
OBL 112	Cell and Molecular Biology	1		70
OZL 111	Animal Diversity	2		35
OZL 112	Animal Anatomy and Physiology	1		35
OBT 111	Diversity of Plants and Fungi	2		70
OBL 314A	Biology Practical	1	70	

Level I – Elective Courses=

Course Code	Course Title	Units	Practical Hours	Lecture Hours
OZL 113	Developmental Biology	1		35
OBT 113	Plant Taxonomy	1		35
OBL 113	Biochemistry and metabolism	2		70
OCH 114	Introductory Chemistry for Biology students	1		35

Level II - Core Courses

Course Code	Course Title	Units	Practical Hours	Lecture Hours
OBT 112	Plant structure and Development	1		35
OBL 211	Fundamentals of Ecology	1		35
OBL 212	Fundamental Genetics and Population Genetics	1		35
OBL 213	Cell Microbiology and Immunology	1		35
OBL 314B	Biology Practical	1	70	

Level II – Elective Courses

Course Code	Course Title	Units	Practical Hours	Lecture Hours
OBL 214	Biometry	1		35
OBL 216	Research Methodology	1		35
OBL 217	Introduction to soil science	1		35
OBT 211	Plant Physiology	1		35
OZL 211	Animal Parasites and Vector Biology	1		35

Level III - Core Courses

Course Code	Course Title	Units	Practical Hours	Lecture Hours
OBL 314C	Biology Practical	1		70
OZL/OBT 314	Biology Special Project	1		

Level III – Elective Courses

Course Code	Course Title	Units	Practical Hours	Lecture Hours
OBL 211	Fundamentals of Ecology	1		35
OBL 311	Evolutionary Biology and Plant Evolution	1		35
OBL 312	Aquatic and Fish Biology	1		35

6.1.7 B.Sc. FOOD, NUTRITION AND DIETECTICS

Code	Modules	Core/Elective	Credits
	LEVEL 1		
OFC 017	Communication skills	Core	10
OCP 100	Introduction to microcomputer studies and Information Technology	Core	10
OFD 100	Human Nutrition & Dietetics	Core	10
OFD 101	Principles of Nutritional Biochemistry	Core	10
OFD 102	Foundation Chemistry	Core	20
OFD 103	Human Anatomy & Physiology	Core	10
OFD 104	Food Microbiology & Safety	Core	20
OFD 106	Introduction to Molecular Biology	Elective	10
OFD 208	Essentials of Food Science	Core	10
OFD 206	Food Processing and preservation	Elective	10
OFD 307	Food, Nutrition and Dietetics Practicals	Core	
	LEVEL 2		
OFD 200	Community health and health promotion	Core	10
OFD 201	Nutritional Diseases and Applied Dietetics	Core	20
OFD 202	Nutritional epidemiology, assessment and surveillance	Core	20
OFD 203	Food Chemistry & Analysis	Core	20
OFD 204	Statistics & Research methods	Core	20
OFD 211	Nutrition through life cycle	Core	10
OFD 212	Nutritional anthropology	Core	10
OFD 207	Consumer Behaviour and Education	Elective	10
OFD 210	Sensory evaluation of foods	Elective	10
OFD 304	Field placements	Core	
OFD 307	Food, Nutrition and Dietetics Practicals	Core	
	LEVEL 3		
OFD 309	Food and nutrition Security	Core	20
OFD 310	Food safety, hygiene & legislation	Core	20
OFD 302	Planning and Management of Nutritional Interventions	Core	10
OFD 304	Field placements	Core	10
OFD 305	Individual Research Project	Core	10
OFD 307	Food, Nutrition and Dietetics Practicals	Core	20
OFD 306	Meal planning and Institutional catering	Core	20
OFD 308	Fundamentals of guidance and counseling	Elective	20

OME 312	Entrepreneurship & Business Development	Elective	20
OPD 202	Gender and Development	Elective	20
OSS 124	Introduction to social psychology	Elective	20

6.2 SCIENCE PRACTICALS AND RESEARCH/ SPECIAL PROJECTS

The practical component of the degree programme is compulsory to all science students. You will be are required to attend a full time residential practical session for not less than two weeks in subjects having a practical component. The courses with practical components include Zoology, Botany, Chemistry, Physics and Environmental Studies, Home Economics & Human Nutrition. In order to attend these practical sessions, you will have to register for the same as you do for other courses in each academic year.

Beginning from the academic year 2018/2019 all practical sessions are conducted at the OUT premises, Kinondoni Regional Centre. Students pursuing BSc Home economics and human nutrition and BSc Food, Nutrition and dietetics will conduct their practicals from SUA. The tentative schedule for practicals will similarly be communicated at the latter stage, usually before July every year. Details regarding the arrangements and the dates of the practical sessions could be obtained at your respective regional centre. During the entire period of the practical sessions, students will be responsible for their travel, boarding and upkeep costs. It is therefore important that students sponsored by the Students' Loan Board process their requests ahead of time to avoid inconveniences caused by last minute arrangements.

We realize that there is a lot of pressure on some individuals to graduate in the shortest time possible. But we would also like to see you being comparable academically to those graduates from conventional Universities, so that you can compete favorably in the market market. Students at conventional Universities have access to the laboratories on a daily basis, so that when one graduates, he/she would have accumulated a lot of laboratory experience. The situation is different in our case. Students have access to the labs only over short periods of time. You can claim equivalency if and only you will accumulate a comparable number of laboratory hours and experience during your years as a University student. Short cuts will create a bad name to The Open University and hence cause problems in the job market for every subsequent OUT graduate.

The marks for practicals are accumulated in the following codes: OBT 350 (Botany), OZL 350 (Zoology), OBL 350/314 (Biology), OHE 350 (Home Economics and Human Nutrition), OFD 307 (Food, Nutrition and Dietetics), OCH 320 (Chemistry), OEV 115 (Environmental Sciences) and OPH 320 (Physics). **Be informed that** these marks for a subject which is core to a respective student must have not less than 25 practicals while a minor should have not less than 15 practicals. Practicals must be distributed in all levels (Level 1-3). That is, you if you are taking **OBT 350** you will have to do **OBT 350A, OBT 350B and OBT350C** for year 1, 2, 3, respectively. NOTE that, The University is incurring a lot of expenses in the course of conducting practicals. Therefore students must register online as they do for other courses. If you do not register, then you will be considered that you are not going to attend practical for that particular academic year. The information needed include name, registration number, the practical code and level you are intending to do the practical.

6.3   RESEARCH / SPECIAL PROJECTS

6.3.1 Eligibility for doing special project

The research/special project is mandatory for all science students except those who major in Mathematics or Biology, for the time being. A final year student does **one project** only in the Major Subject. The recommended duration for the science project is ten weeks.

The University is incurring a lot of expenses in the course of conducting final year Research/Special Projects. Therefore, in order to justify the expense, the opportunity shall be availed only to those students who are genuinely about to complete their respective degree programmes. The number of years in registration shall not be used as a criterion to do the research project. Hence only those students who have completed at least 16 units in the major subject and 9 units in the minor subject, thus making up **a total of 25 science units completed**, will be allowed to do the project.

Students wishing to do the research/special project will have to indicate their intention to do so to the respective Head of Department, and also register online as it is the case with other courses. Then upon being **granted permission and allocated supervisor**, the student may proceed with proposal development prior to embarking to the actual research.

6.3.2 Procedure to do Research/Special Project at Home Institution

Any student who opts to do the research/special project at his or her place of work shall adhere to the following procedure:

- The name of the Ph.D. holder who will supervise the student shall be forwarded to the Faculty;
- The student shall submit a research proposal, endorsed by the supervisor, to the Faculty, before end of February of every year;
- The student shall be **granted permission** to proceed with the project;
- A marked research project report shall reach the Faculty not later than end of August 2020; and

For the time being research/special projects are compulsory in the following subjects: Botany, Zoology, Chemistry, Physics, Home Economics and Human Nutrition as well as Food, Nutrition and Dietetics. Pairing is allowed only during data collection. But each student must write his/her own report. Pairing in writing the report will be awarded zero mark to both students.

Faculty contacts

S/No.	Name of Department	Head of Department	E-mail	Mobile Number
1	Biological and Food Sciences	Dr. Happy Magoha	happy.magoha@out.ac.tz	0754299116
2	Physical and Environmental Sciences (Physics, Chemistry and Environmental)	Prof Paul Ikwaba	paul.ikwaba@out.ac.tz	0765-252628
3	Mathematics and Information and Communication Technology	Dr. Rogers Bhalalusesa	rogers.balalusesa@out.ac.tz	0679 950442

NON-DEGREE PROGRAMMES
- **Basic Certificate in Computing and IT - NTA Level 4**
  Modules – Semester I

Code	Module Title	Scheme of study Hrs/Wk				
		L	T	P	AS	Credits
IET 04101	Computer Fundamentals	4	2	2	2	15
IET 04108	Computing Mathematics	3	2		3	12
IET 04102	Office Automation Fundamentals	2	1	2	1	9
IET 04107	Communication Skills	2	2		2	9
IET 04110	Introduction to Entrepreneurship Skills	4	3		3	15

		15	10	4	11	60
Total Hours/week		40				

Modules – Semester II

Code	Module name	Scheme of study Hrs/Wk				
		L	T	P	AS	Credit
IET 04203	Principles of Computer Support and Maintenance	4	1	2	1	12
IET 04204	Introduction to Web Technologies	2	1	2	1	9
IET 04205	Helpdesk Operations	1		2	1	6
IET 04206	Network Essentials	2		2	2	9
IET 04211	Practical Training					18
IET 04209	Introduction to cross-cutting issues	2	1		1	6
Sub-total Hours/Week		11	3	8	6	60
		28				

- **Technician Certificate in Computing and IT - NTA Level 5**

Modules – Semester I

code	Title	Scheme of study Hrs/Wk				
		L	T	P	AS	Credit
IET 05101	Computer Architecture and Systems	2	2	2	2	12
IET 05103	Computing Mathematics	2	2		2	9
IET 05104	Introduction to Programming	4	1	2	1	12
IET 05105	Database Design and Implementation	2	1	2	1	9
IET 05108	Business and Entrepreneurship Skills	2	2		2	9
IET 05110	Cross-cutting issues: Environment, gender, HIV/AIDS, Poverty and Morals	3	1		2	9
Sub-total Hours/Week		15	9	6	8	
Total Hours/week		40				60

Modules – Semester II

Code	Module Title	Scheme of study Hrs/Wk				
		L	T	P	AS	Credit
IET 05202	Managing Computer Systems	3	1	2	2	12
IET 05206	Website Design	2	1	2	1	9
IET 05207	Network Design and Implementation	2	1	2	1	9
IET 05209	Leadership and Management	3	1	0	2	9

IET 05211	ICT in business process	2	1	0	1	6
IET 05212	Industrial Training					15
	Sub-total Hours/Week	*12*	*5*	*6*	*7*	
	Total Hours/week			**30**		**60**

- **Ordinary Diploma in Computer Science - NTA level 6**
  Modules – Semester I

Code	Module Title	Core/ Fundamental	Scheme of Study Hrs/Wk				
			L	T	P	AS	Credit
IET 06101	Advanced Website Design		3		3	2	12
IET 06102	System Analysis and Design		3	3		2	12
IET 06104	Object Oriented Programming		3		3	2	12
IET 06105	Database System Design and Administration		3		3	2	12
IET 06106	System Administration		3		3	2	12
Sub-Total hours/week			15	3	12	10	
Total hours/week			40				60

Modules – Semester II

Code	Module Title	Core/ Fundamental	Scheme of Study Hrs/Wk				
			L	T	P	AS	Credit
IET 06207	System Modelling		3	3		2	12
IET 06203	Network Management		3		3	2	12
IET 06209	Research Methodology		3	3		2	12
IET 06212	Multimedia Applications		2	3	2	3	15
IET 06213	Cross-cutting issues in ICT		3	1		2	9
IET 06308	Project Management		2	1		1	6
Sub-Total hours/week			**16**	**11**	**5**	**12**	
Total hours/week			**40**				**60**

7.0   ADVICE ON DISTANCE LEARNING

As an Open University student, you are learning at a distance. In this regard, printed materials (units and lectures) are relied on rather than face-to-face

teaching you would otherwise receive if you were a conventional university student. If you have ever taken a correspondence course in the past, you will be familiar with some of the difficulties you may encounter as a distance study learner. Even so, you will probably find it helpful to take note of the following advice and suggestions.

7.1 Planning your time

- One thing about studying is that it takes time. In this regard, you must make time for studying by giving up other things you have been doing but can be reserved. This is not always an easy matter. Therefore, you will have to re-examine your activities to see what you can do without. In this respect, you will find it quite helpful to draw up a study plan of your own. We expect you to complete each unit in about two months. This calls for setting at least two hours for studying every day. By sticking to such a timetable, you will be able to complete your degree in six years. Here are some suggestions on how to use your time well.
- Plan study sessions you think you will need to cover a lecture or a part of the unit.
- Make a study timetable showing your activities for a week time, taking account of the time for work, recreation, family commitments and other pressing activities:
- Tackle your toughest work at a time when you are at your best, whether this is the first thing in the morning, later in the day, or even in the middle of the night:
- Leave enough free time for recreation (including sleep) and leisure. It is important not to let your studies get you down – or you and your studies will suffer.
- Make a note of what you hope to achieve in each study session. The goals can be completing tasks such as a lecture, an assignment, reading a chapter of a book or several chapters:
- Begin working at the very start of each study session and remember first to review what you did in your last session on a topic:
- You will need to consider how to allocate your time between the subjects you are studying.
- Since you need e cooperation from your family members, you should take their interests into account when programming your work. Do not cause a strained situation by leaving them out of your timetable.

7.2   Where to study
- Wherever you find a place to work, develop a habit of studying at that particular place always. This habit curtails destruction from your work and triggers your learning mood the moment you sit down at that particular place. Contrarily, do not let this 'place habit 'get so strong that you are incapable of studying in different places.
- Apart from your books, stationery, dictionary, and correspondence materials, you need is a table, a chair, and a good light.
- Most people find it best to sit up at a table, as they find it difficult to concentrate when sitting back in an armchair, lying on a bed or the ground.
- Try to keep your study place well ventilated.
- Make sure that you will not be interrupted during your study sessions. Clearly, you will need the goodwill and cooperation of your family and friends in this, but let your study hours be clear to your friends so that they too will respect your work.

7.3   How you should study each unit
- Each unit you work on should take you about seventy hours of study. You should be trying to study for about two hours every day.
- Here are some suggested steps to follow when studying a new lecture
  - Read the whole lecture through, once
  - Now study each part of it, reading slowly and with understanding.
  - Try to **comprehend** a material you are studying
  - Study objectives of the lesson to assess where you are heading
  - Read the introduction to get an overview of the lecture
  - Pause to think about each section before you move on to the next one.
  - Lookup any difficult words in your dictionary.
  - Discuss a lecture you have read with a colleague. If there is one around, get in touch with your field subject tutor.
  - University materials are not meant to be easy. Thus, plan to revise what you long studied, possibly with the aid of other books.
  - As you study your units, reflect on the materials and ask yourself, 'What have I learnt so far?

7.4   Do Activities and Answer Self-tests

- When you have finished studying a lecture, turn back to the objectives of the lecture and assess whether you have achieved them all. That is, can you do what they expect you to do? If there is an objective that you cannot fulfil, go to the part of the lecture where there is information about it and study that section again. Then spend some time relating what you have learned to the preceding lectures. At the end of the unit, check back on the general objectives to see whether you have achieved them all.

8.0   STUDENT WELFARE DIVISION
8.1   Dean of Students

The Dean of Students' Office deals with students' Affairs. The office is the bridge between OUT students and the University Administration. That is, all students are supposed to channel their problems or concerns through the Dean of Students' Office. In order to be effective, the DoS is assisted by Directors of Regional Centres (DRC)/Returning Officers and The Open University of Tanzania Student Organization (OUTSO) leaders.The DoS main responsibility is to serve students through guidance and counselling related to personal, academic, social and career matters. The DoS even help students with finding solutions to problems such as financial challenges.

Services offered at the office of the DoS include; -guidance and counselling, students' discipline, issues with The Higher Education Students Loan Board (HESLB), sports and games programmes at (OUT), gender and HIV/AIDS clubs in regional centres, student's assistance fund, Robert Mugabe African Council for Distance Education Legacy (ACDE) Scholarship and Tertiary Education Scholarship Trust (TEST) For Tanzania, Students with Special Needs.

Important contacts of the staff in the office of the Dean are as follows:-
i)   Dean of Students; Dr. Zacharia Regnard Rwejuna reginard.zacharia@out.ac.tz (0716033213)
ii)   Associated Dean of Students: Ms Sophia Nchimbi sophia.nchimbi@out.ac.tz
iii)   Senior students' welfare officer; Mwanawetu Mbonde mwanawetu.mbonde@out.ac.tz
iv)   Sports and games coach: Consolata Mwendabantu consolata.mwendabantu@out.ac.tz

9.0 REGIONAL CENTRES AND CONTACTS OF DIRECTORS

S/N	CENTRE	NAME	PHONE NO.
1.	Arusha	Dr. Namgware Msofe	0688987289
2.	Coast	Dr. Josephat Saria	0655328346
3.	Dodoma	Dr. Mohamed Msoroka	0684 273756
4.	Geita	Mr. Ali Abdul	0764 -234821
5.	Ilala	Dr. Bahati Mbilinyi	0754 -363975
6.	Iringa	Dr. Nasra Ally	0717 458704
7.	Kagera	Mr. Medard Rembesha	0765 108172
8.	Kahama	Mr. Oscar Damas	0717 -085816
9.	Katavi	Dr. Juma Matonya	0742 -380507
10.	Kigoma	Ms. Chitegese Minanago	0715-874005
11.	Kilimanjaro	Dr. Dennis Semiono	0754026956
12.	Kinondoni	Dr. Diones Ndolage	0754-467293
13.	Lindi	Ms. Neema Magambo	0717 -213005
14.	Manyara	Mr. Ahmed Idd Mussa	0714060617
15.	Mara	Dr. Asha B. Katamba	0759 -837454
16.	Mbeya	Dr. Goodluck	0713 -046591
17.	Morogoro	Dr. Wambuka Rangi	0713 -454296
18.	Mtwara	Dr. Msafiri Njoroge	0754405483
19.	Mwanza	MS. Ancyfrida Prosper	0764 -580233
20.	Njombe	Mr. Godwin Kessy	0713-316845
21.	Pemba	Mr. Suleiman Nassor	0777 -424767
22.	Rukwa	Dr. Adam Namamba	0683 -201805
23.	Ruvuma	Dr. Julius Frank	0754 -635189
24.	Shinyanga	Ms. Agatha Mgogo	0754 -574864
25.	Simiyu	Mr. Raphael Mokoki	0715 -154020
26.	Singida	Benard Komba	0766055884
27.	Songwe	Mr. Lusekelo Mwanongwa	0769 -434309
28.	Tabora	Dr. Johnas Buhori	0757210969
29.	Tanga	Ms. Hafidha Khatibu	0713 656946
30.	Tunduru	Mr. Katuma Wandwi	0713 184869
31.	Zanzibar	Dr. Salma O. Hamad	0778 -701115