

FACULTY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL STUDIES

DEAN'S MESSAGE ORIENTATION MESSAGE FOR THE COMMENCEMENT OF 2023/2024 ACADEMIC YEAR

Dear students, Ladies and gentlemen,

It is my great pleasure to welcome you to the Open University of Tanzania (OUT). I wish to congratulate everyone for securing a university place at the OUT and for choosing to study at the OUT. The Open University of Tanzania puts the student at the centre of everything it does; your experience here at the OUT and your success is important to each and every staff. I hope this is a perfect destination for you to realize your dreams.

ABOUT THE FACULTY

The Faculty of Science, Technology and Environmental Studies (FSTES) is one of the five faculties at the Open University of Tanzania. It has three departments namely (i) the Department of Physical and Environmental Sciences, (ii) the Department of Biological and Food Sciences, and (iii) the Department of Mathematics and Information and Communication Technology (ICT). Each of these departments hosts various programmes at non-degree, undergraduate and postgraduate levels.

PROGRAMMES ON OFFER

The FSTES offers several programmes ranging from non-degree programmes to Ph.D programmes as follows:

Non-Degree Programmes

1. Technician Certificate in Computing and IT-NTA Level 5
2. Ordinary Diploma in Computer Science – NTA Level 6
3. Certificate in Poultry Production and Health (Under review)
4. Diploma in Poultry Production and Health (Under review)

Undergraduate Programmes

1. B.Sc. General
2. B.Sc. with Education
3. B.Sc. in Energy Resources
4. B.Sc. Food, Nutrition and Dietetics
5. B.Sc. Home Economics with Education
6. B.Sc. Information and Communication Technology
7. B.Sc. Data Management
8. B.Sc. Environmental Studies

CLARIFICATION ON THE B.Sc. GENERAL AND B.Sc. (EDUCATION) PROGRAMMES

For the said two programmes, the FSTES offers single and Double Subject combinations as follows:

Single Subject Degrees:

Single subject degrees are offered only in the following:

- Mathematics (Double Mathematics)
- Home Economics and Human Nutrition
- Information and Communication Technology, and
- Environmental Studies

NOTE: Single subject degrees are NOT offered to B.Sc. Education students because all Education students MUST have TWO teaching subjects.

Two (Double) Subjects Degrees

The following are the combinations for double subject degrees (B.Sc. General and B.Sc. with Education)

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|----------------------------|-------------------------------|
| 1. Zoology and Botany | 6. Mathematics and Chemistry |
| 2. Zoology and Chemistry | 7. Biology and Geography |
| 3. Chemistry and Biology | 8. Chemistry and Geography |
| 4. Physics and Chemistry | 9. Mathematics and Geography |
| 5. Mathematics and Physics | 10. Mathematics and Economics |

NOTE: For subject combinations involving courses from other faculties, a special project should be conducted in the science subject.

Bachelor of Science with Education (B.Sc. Educ.) Programme

Students pursuing B.Sc. with education are required to do 12 units for each teaching subject PLUS the required education units. For example, if you are registered for B.Sc. with education, and your subject combination is Physics and Chemistry, then you need to complete 12 units of Physics and 12 units of Chemistry and the required units of Education courses as specified by the Faculty of Education in order to graduate.

POSTGRADUATE PROGRAMMES

In addition to non-degree and undergraduate programmes, the FSTES also runs postgraduate programmes in Physics, Chemistry, Mathematics, Biology, Human Nutrition, Food Science, ICT, Applied Biotechnology and Environmental studies at M.Sc. and Ph.D levels. All these postgraduate programmes are by thesis only with the exception of M.Sc Information Technology Management, M.Sc Computer Science and Master of Environmental Studies which are run by course work

and dissertation. Master of Environmental Studies has three options namely (i) Science stream, (ii) Health stream and (iii) Management stream.

The faculty of Science, Technology and Environmental Studies also runs *Master of Public Health (MPH)* by Distance in collaboration with MUHAS (School of Public Health).

SCIENCE PRACTICALS

Science is never complete without practical demonstration and thus the practical component of the degree programme is compulsory. You will be required to attend a full time residential practical session for about six weeks in subjects having a practical component. The practicals for Zoology, Botany, Chemistry, Physics as well as Energy Resources will be conducted at our laboratories at Kinondoni regional centre, Dar es Salaam. However, for the time being, the practicals for B.Sc. Food, Nutrition & Dietetics and B.Sc. (Home Economics & Human Nutrition) programmes practicals are conducted using the laboratory facilities of Sokoine University Agriculture, Morogoro. The confirmation on practical arrangements will be shared to you well in advance including the tentative schedule.

During the entire period of the practical sessions, you will be responsible for your travel, accommodation and upkeep. It is therefore important that students sponsored by the Students' Higher Education Loan Board process their requests ahead of time to avoid inconveniences caused by last minute arrangements.

The marks for practicals are accumulated in the following codes: OBT 350 (Botany), OZL 350 (Zoology), OBL 350/ OBL 314 (Biology), OHE 350 (Home Economics & Human Nutrition), OCH 350/ OCH 320 (Chemistry), OPH 350/ OPH 320 (Physics), OFD 307 (Food, Nutrition & Dietetics), and OPH 320 (Energy Resources). Practical must be distributed in all levels (Level 1-3). Be informed that Practical is a core course for all students taking that programme and you have to do not less than 25 practicals.

NOTE: As it is the case with other courses, you must register online to be eligible to attend the practical sessions. If you do not register then you will be considered that you will not attend this year.

RESEARCH / SPECIAL PROJECTS

Eligibility for doing special project

The research/special project is mandatory for all students except those who major in Mathematics. A final year student does one project only in the Major Subject. The recommended duration of the project is six months of the final level.

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 25 units (B.Sc. Educ) or at least 16 units in the major subject and at least 9 units in the minor subject will be allowed to do the special 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. Guidelines for developing a proposal and how the special project will be written are available at the office of the director of regional centre and your Head of Department.

MINIMUM NUMBER OF UNITS FOR GRADUATION

The minimum number of units for graduation varies from one programme to another as follows:

1. B.Sc. (Gen.) – 36 units including 1 or 2 units from the practicals
2. B.Sc. (Educ.) – 38 units including 1 or 2 units from the practicals
3. B.Sc. Environmental Studies – 38 units
4. B.Sc. Food, Nutrition and Dietetics – 38 units
5. B.Sc. Home Economics with Education – 38 units
6. B.Sc. (Energy Resources) – 38 units
7. B.Sc. ICT – 40 units
8. B.Sc. Data Management – 40 units

MODE OF STUDY AND SUPPORT SERVICES

The FSTES runs most of its undergraduate degree programmes through e-learning (blended) mode of delivery, except for some programmes such as B.Sc ICT and B.Sc. Data Management which have enhanced short face to face sessions to complement e-learning. For the non-degree programmes in particular the Basic Technician Certificate in Computing and IT (NTA Level 4) and Ordinary Diploma in Computer Science (NTA Level 5 and 6) these are taught programmes that involve intensive face to face sessions. For the blended mode, the main medium of instruction is through MOODLE platform. This is achieved using uploaded teaching and learning materials for each course which are available on the OUT website under the e-Learning Management Information System (eLMS) (<https://elms.out.ac.tz/>). In the LMS

(MOODLE), you will find lecture notes, power point presentation, video clips, activities, revision questions and references.

Support services for students are provided in the form of occasional face-to-face teaching, ICT based electronic platforms (online discussions), compact discs (CDs), Internet (where available), library services, other teaching/learning media available at the OUT website such as open resource courseware like MIT and AVU as well as through direct consultation with course instructors. Other support services are available during science practical sessions, teaching practices and field attachments for some programmes.

Dear Students,

I have tried to summarise the necessary information that can make a good starting point of your academic career at the OUT. However, I would argue you to access the FSTES handbook 2023/2024 and OUT prospectus for 2023/2024 academic year to enrich your understanding of the Faculty issues and the general running of different programmes. For more clarification you can also consult the heads of respective departments through their contacts as indicated hereunder.

S/No	Name of Department	Head of Department	E-mail	Mobile Number
1	Biological and Food and Nutrition	Dr Happy Magoha	happy.magoha@out.ac.tz	0754 299119
2	Physical and Environmental Sciences	Prof. Damasen Paul Ikwaba	paul.ikwaba@out.ac.tz	0765252628
3	Mathematics and Information and Communication Technology	Dr Juliana Kamaghe	juliana.kamaghe@out.ac.tz	0754043246

Please note that when using mobile phone to contact your head of department or tutor, it is advisable to use SMS giving your name, registration number and regional center. In case you decide to communicate using email, make sure you use student email provided by the University

Dear Students,

Once again, I welcome you at the FSTES and I am confident that you will enjoy this student-centered mode of learning.



Prof. Dr. Matobola J. Mihale
Dean, FSTES