

# THE FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE ADVERTISEMENT FOR ADMISSION INTO POSTGRADUATE PROGRAMMES FOR 2020/2021 ACADEMIC SESSION

Applications are invited from suitably qualified candidates for admission into the following Postgraduate Programmes of the Federal University of Technology, Akure for the 2020/2021 Academic Session

### **Preamble**

### The School of Postgraduate Studies

As part of its Vision and Mission in terms of the development of high-level skilled manpower for the country, Council of The Federal University of Technology, Akure approved the establishment of the Board of Postgraduate Studies in 1986, which metamorphosed into School of Postgraduate Studies in 1994.

In pursuance of the primary objectives of the Federal Government for the establishment of the Universities of Technology, the Postgraduate Programmes of The Federal University of Technology, Akure are intended to consolidate and build upon the solid intellectual and technological foundations which the undergraduate courses in the University have been most carefully designed to achieve.

The need for purposeful and functional education, which fosters technology for selfreliance, as an antidote to under-development, is the underlying principle for the design of specific Postgraduate Programmes in the various Schools of the University. The mission of the School of Postgraduate Studies includes the development and offering of academic and professional programmes leading to the award of postgraduate diplomas and higher degrees which emphasize planning, adaptive and productive skills in the engineering, scientific, agricultural, environmental professional and allied disciplines.

Within the context of these general objectives therefore, graduate students of The Federal University of Technology, Akure are trained to:

- (i) have a very sound and an in-depth knowledge of the basic principles underlying the body of knowledge they are being trained to master;
- (ii) develop a broad analytical mind that would enhance major intellectual and technological break-through to improve the lot of man and

the society, through basic and need-driven research programmes; and

(iii) be adequately versed in their discipline, and be competent to impart the knowledge on others in a conducive academic environment to ensure the continued existence of the system.

It is worth mentioning that our admission policy reflects 60% undergraduate and 40% postgraduate supported by highly qualified academic staff.

# A. HIGHER DEGREE PROGRAMMES AND POSTGRADUATE DIPLOMA (PGD) PROGRAMMES AVAILABLE

- (i) Doctor of Philosophy (Ph.D)
- (ii)Master of Philosophy (M. Phil.), Master of Philosophy/ Doctor of Philosophy (M.Phil./Ph.D), Master of Agricultural Technology (M. Agric. Tech.), Master of Engineering (M. Eng.) and Master of Technology (M. Tech.)
- (iii) Postgraduate Diploma (PGD)

# 1. SCHOOL OF AGRICULTURE AND AGRICULTURAL TECHNOLOGY (SAAT)

- (A) Doctor of Philosophy (Ph.D), Master of Agricultural Technology (M.Agric.Tech.), Master of Technology (M.Tech. for only Department of Food Science and Technology) are available in the following Departments and Options:
- (i) Department of Agricultural Extension and Communication Technology (AEC)

# (a) M.Agric.Tech. Agric. Extension & Communication Technology

- General Extension
- Rural Development
- Rural Sociology
- Technology Transfer
- Communication
- (b) **Ph.D**
- General Extension

- Rural Development
- Rural Sociology
- Technology Transfer
- Communication

### (ii) Department of Agricultural and Resource Economics (ARE)

### (a) M.Agric.Tech. Agricultural and Resource Economics

- Production Economics
- Environmental Economics
- Farm Management
- Finance & Marketing

### (b) **Ph.D**

- Production Economics
- Environmental Economics
- Farm Management
- Finance & Marketing

# (iii) Department of Animal Production and Health (APH)

### (a) M.Agric.Tech.

#### (i) Animal Production

- Agricultural Biochemistry and Nutrition
- Animal Breeding and Genetics
- Animal Production and Management (Poultry, Swine, Sheep and Goat, Rabbit/Micro-livestock)
- Animal Reproduction and Environmental Physiology

### (ii) Animal Health

- Animal Parasitology
- Animal Microbiology
- Farm Hygiene and Disease Prevention

#### (b) **Ph.D**

### (i) Animal Production

- Agricultural Biochemistry and Nutrition
- Animal Breeding and Genetics
- Animal Production and Management (Poultry, Swine, Sheep and Goat, Rabbit/Microlivestock)

### Animal Physiology and Reproduction

### (ii) Animal Health

- Animal Parasitology
- Animal Microbiology
- Farm Hygiene and Disease Prevention

### (iv) Department of Crop, Soil and Pest Management (CSP)

### (a) PGD Crop, Soil and Pest Management

### (b) M.Agric.Tech.

### (i) Crop Management Technology

- Plant Systematics & Taxonomy
- Plant Breeding & Genetics
- Crop Physiology
- Horticulture
- Agronomy/Farming Systems

### (ii) Soil Management Technology

- Soil Fertility
- Fertilizer Use Technology
- Land Survey and Management
- Plant Nutrition
- Soil Survey & Classification

### (iii) Pest Management Technology

- Crop Entomology
- Plant Pathology
- Nematology
- Plant Virology
- Weed Management
- Weed Biology & Ecology

### (c) Ph.D

### (i) Crop Management Technology

- Plant Systematics & Taxonomy
- Plant Breeding & Genetics
- Crop Physiology
- Horticulture
- Agronomy

### (ii) Soil Management Technology

- Soil Fertility
- Fertilizer Use Technology
- Land Survey and Management
- Plant Nutrition

• Soil Survey & Classification

### (iii) Pest Management Technology

- Crop Entomology
- Plant Pathology
- Nematology
- Plant Virology
- Weed Management
- Weed Biology & Ecology

### (v) Department of Fisheries and Aquaculture Technology (FAT)

(a) PGD Fisheries and Aquaculture Technology

# (b) M. Agric. Tech. Fisheries & Aquaculture Technology

- Aquaculture
- Fisheries Management

# (c) Ph.D Fisheries & Aquaculture Technology

- Aquaculture
- Fisheries Management
- Fish Nutrition
- Fish Breeding
- Fisheries Economics
- Fish Processing & Utilization

# (vi) Department of Ecotourism and Wildlife Management (EWM)

(a) PGD Ecotourism and Wildlife Management

# (b) M.Agric.Tech. Ecotourism & Wildlife Management

- Wildlife Ecology and Range Management
- Biodiversity Conservation & Management
- Wildlife Nutrition and Production
- Ecotourism and Hospitality Management

# (c) Ph.D Ecotourism & Wildlife Management

• Wildlife Management

- Range Management
- Biodiversity and Conservation
- Wildlife Nutrition and Production
- Ecotourism Management
- Hospitality Management

### (vii) Department of Forestry & Wood Technology (FWT)

# (a) M.Agric.Tech. Forestry & Wood Technology

- Forest Resources Management
- Forest Biology/Silviculture
- Agroforestry/Soils
- Wood Science Technology
- Wood Products Technology
- Forest Inventory & Biometrics

In addition to the above-stated options, students may conduct research in the following areas:

- Herbal Science Natural Therapeutic
- Biocomposite Technology
- Furniture Design & Production
- Wood Processing Technology

### (b) Ph.D Forestry & Wood Technology

- Forest Resources Management
- Forest Biology/Silviculture
- Agroforestry/Soils
- Wood Science Technology
- Wood Products Technology
- Forest Inventory & Biometrics

In addition to the above-stated options, students may conduct research in the following areas:

- Herbal Science Natural Therapeutic
- Biocomposite Technology
- Furniture Design & Production
- Wood Processing Technology

### (viii) Department of Food Science and Technology (FST)

### (a) M.Tech. Food Science and Technology

Food Chemistry

- Human Nutrition
- Food Processing
- Post-Harvest Technology

### (b) Ph.D Food Science and Technology

- Food Chemistry
- Human Nutrition
- Food Processing
- Post-Harvest Technology

# 2. SCHOOL OF ENGINEERING AND ENGINEERING TECHNOLOGY (SEET)

Doctor of Philosophy (Ph. D), Master of Engineering (M. Eng.) and Postgraduate Diploma (PGD) programmes are available in the following Departments and Options:

### (i) Department of Agricultural Engineering (AGE)

### (a) M.Eng. Agricultural Engineering

- Farm Power and Machinery
- Soil and Water Engineering
- Processing and Storage Engineering
- Farm Structures and Environmental Control
- Alternative Energy

### (b) Ph.D Agricultural Engineering

- Farm Power and Machinery
- Soil and Water Conservation Engineering
- Post-Harvesting Engineering
- Farm Structures and Environmental Control
- Alternative Energy

### (ii) Department of Civil Engineering (CVE)

### (a) **PGD** Civil Engineering

### (b) M. Eng. Civil Engineering

- Geotechnical Engineering
- Structural Engineering
- Highway and Transportation Engineering
- Water Resources and Environmental Engineering

### Construction Engineering

### (b) Ph.D Civil Engineering

- Geotechnical Engineering
- Structural Engineering
- Highway and Transportation Engineering
- Water Resources and Environmental Engineering
- Construction Engineering

### (ii) Department of Electrical & Electronics Engineering (EEE)

(a) **PGD** Electrical and Electronics Engineering

### (b) M. Eng. Electrical & Electronics Engineering

- Power Systems Engineering
- Communications Engineering
- Control Engineering

### (c) Ph. D Electrical & Electronics Engineering

- Power Systems Engineering
- Communications Engineering
- Control Engineering

### (iv)Department of Mechanical Engineering (MEE)

(a) **PGD** Mechanical Engineering

### (b) M.Eng. Mechanical Engineering

- Production Engineering
- Industrial Engineering/Operations Research
- Building Services Engineering
- Energy Systems
- Thermofluids
- Computational Fluid Dynamics

### (c) Ph.D Mechanical Engineering

- Production Engineering
- Industrial Engineering/Operations Research
- Building Services Engineering
- Energy Systems
- Thermofluids
- Computational Fluid Dynamics

# (v) Department of Metallurgical & Materials Engineering (MME)

(a) PGD Metallurgical & Materials Engineering

## (b) M.Eng. Metallurgical & Materials Engineering

- Production/Mechanical Metallurgy
- Physical Metallurgy
- Corrosion Engineering
- Advanced Materials Engineering
- Mineral Engineering (Mineral Processing Technology/Extractive Metallurgy)

# (c) Ph.D Metallurgical & Materials Engineering

- Production/Mechanical Metallurgy
- Physical Metallurgy
- Corrosion Engineering
- Advanced Materials Engineering
- Mineral Engineering (Mineral Processing Technology/Extractive Metallurgy)

# (vi) Department of Mining Engineering (MNE)

### (a) M.Eng. Mining Engineering

- Surface Mining
- Underground Mining
- Rock Mechanics
- Mineral Processing
- Mine Safety and Environment
- Mine Management and Mineral Economics
- Mine Surveying & Photogrammetry

### (b) Ph.D Mining Engineering

- Surface Mining
- Underground Mining
- Rock Mechanics
- Mineral Processing
- Mine Management and Mineral Economics
- Mine Safety and Environment
- Mine Surveying & Photogrammetry

# 3. SCHOOL OF ENVIRONMENTAL TECHNOLOGY (SET)

Doctor of Philosophy (Ph. D), Master of Philosophy (Architecture) (M. Phil.), Master

of Technology (M. Tech.) and Postgraduate Diploma (PGD) programmes are available in the following Departments and Options:

### (i) Department of Architecture (ARC)

- (a) M.Tech. Architecture
- (b) M.Phil Architecture
- (c) M.Phil/Ph.D Architecture
- (d) Ph.D Architecture

# (ii) Department of Urban and Regional Planning

- (a) PGD Urban and Regional Planning
- (b) M.Tech. Urban and Regional Planning
- (c) **Ph.D** Urban and Regional Planning

### (iii) Department of Estate Management (ESM)

- (a) M.Tech. Estate Management
- (b) **Ph.D** Estate Management

### (iv) Department of Quantity Surveying (QSV)

- (a) PGD
  - Quantity Surveying
  - Construction Management

### (b) M.Tech. Quantity Surveying

- Cost Management
- Construction Economics
- Quantity Surveying Practices
- Procurement Studies

### (c) Ph.D

- Cost Management
- Construction Economics
- Quantity Surveying Practices
- Procurement Studies

### (v) Department of Industrial Design (IDD)

(a) M.Tech. Industrial Design

- Ceramics Design
- Graphics
- Textile Design

### (b) Ph.D Industrial Design

- Ceramics Design
- Graphics
- Textile Design

### (vi) Department of Surveying and Geoinformatics

Postgraduate Diploma (PGD) in Surveying and Geoinformatics

### 4. SCHOOL OF EARTH AND MINERAL SCIENCES (SEMS)

Doctor of Philosophy (Ph.D), Master of Technology (M.Tech.) and Postgraduate Diploma Programmes are available in the following Departments and Options:

### (i) Department of Applied Geology (AGY)

### (a) M.Tech. Applied Geology

- Mineral Exploration
- Remote Sensing
- Hydrogeology and Engineering Geology
- Petroleum and Sedimentary Geology

### (b) Ph.D Applied Geology

- Remote Sensing
- Hydrogeology
- Engineering Geology
- Petroleum Geology
- Sedimentology
- Structural Geology

### (ii) Department of Applied Geophysics (AGP)

### (a) M.Tech. Exploration Geophysics

- Petroleum Exploration
- Mining Geophysics
- Groundwater/Environmental/ Engineering Geophysics

### (b) Ph.D Exploration Geophysics

- Petroleum Exploration
- Mining Geophysics
- Groundwater/Environmental/ Engineering Geophysics

# (iii) Department of Meteorology & Climate Science (MCS)

### (a) M.Tech. Meteorology

- Numerical Weather Forecasting
- Agrometeorology

### (b) Ph.D Meteorology

- Numerical Weather Forecasting
- Synoptic Meteorology
- Aviation Meteorology
- Satellite Meteorology
- Air Pollution Meteorology
- Agrometeorology

### (iv) Department of Remote Sensing and GIS

### (a) PGD Remote Sensing and GIS

### (b) M.Tech. Remote Sensing and GIS

- Earth Resources Exploration
- Natural Hazards and Disaster Risk Management
- Geoinformation Science
- Natural Resources Management

### (b) Ph.D Remote Sensing and GIS

- Earth Resources Exploration
- Natural Hazards and Disaster Risk Management
- Geoinformation Science
- Natural Resources Management

### 5. SCHOOL OF MANAGEMENT TECHNOLOGY (SMAT)

Doctor of Philosophy (Ph.D), Master of Technology (M.Tech.) and Postgraduate Diploma (PGD) programmes are available in the following Departments and Options:

### (i) Department of Project Management Technology (PMT)

(a) PGD Project Management Technology

#### (b) M.Tech.

- Project Management Technology
- Management Science

#### (c) Ph.D

- Project Management Technology
- Management Science

### (ii) Department of Logistics and Transport Management

Technology (LTT)

### (a) M.Tech. Transport Management Technology

- Land Transport Management Technology
- Logistics & Supply Chain Management
- Maritime Management Technology
- Air Transport Management Technology

### (b)Ph.D Transport Management Technology

- Land Transport Management Technology
- Maritime Management Technology
- Air Transport Management Technology
- Logistics & Supply Chain Management

### **6. SCHOOL OF COMPUTING (SOC)**

# Department of Computer Science (CSC)

- (a) M.Tech. Computer Science
- (b) M.Phil. Computer Science
- (c) Ph.D Computer Science

### 7. SCHOOL OF LIFE SCIENCES (SOLS)

Doctor of Philosophy (Ph.D) and Master of Technology (M.Tech.), and Postgraduate Diploma (PGD) programmes are available in the following Departments and Options:

### (i) Department of Biochemistry (BCH)

- (a) **PGD** Biochemistry
  - Applied Biochemistry
  - Clinical Biochemistry

### (b) M.Tech. Biochemistry

- Enzymology
- Microbial Biochemistry
- Food/Nutritional Biochemistry
- Toxicology

### (c) Ph.D Biochemistry

- Enzymology
- Microbial Biochemistry
- Food/Nutritional Biochemistry
- Toxicology

### (ii) Department of Biology (BIO)

### (a) M.Tech. Biology

- Food Storage Technology
- Applied Parasitology
- Environmental Biology and Public Health
- Applied Entomology and Pest Management

### (b) Ph.D Biology

- Applied Parasitology
- Storage Microbiology
- Storage Entomology/Applied Entomology
- Post-Harvest Biology
- Environmental Biology and Public Health

### (iii) Department of Microbiology (MCB)

- (a) **PGD** Microbiology
  - Food Microbiology
  - Medical Microbiology
  - Environmental Microbiology

### (b) M.Tech. Microbiology

Food Microbiology

- Environmental Microbiology
- Medical Microbiology

### (c) Ph.D Microbiology

- Food Microbiology
- Environmental Microbiology
- Medical Microbiology

### 8. SCHOOL OF PHYSICAL SCIENCES (SOPS)

Doctor of Philosophy (Ph.D) and Master of Technology (M.Tech.), and Postgraduate Diploma (PGD) programmes are available in the following Departments and Options:

### (i) Department of Chemistry (CHE)

### (a) M.Tech. Chemistry (Academic)

- Analytical Chemistry
- Industrial Chemistry
- Environmental Chemistry

### (b) Ph.D Chemistry

- Analytical Chemistry
- Industrial Chemistry
- Environmental Chemistry
- Food Chemistry
- Polymer Chemistry
- Organic Chemistry
- Inorganic Chemistry
- Physical Chemistry

# (ii) Department of Mathematical Sciences (MTS)

### (a) M.Tech. Industrial Mathematics

- Dynamics of Structure (Solid Mechanics)
- Numerical Methods in Ordinary Differential Equations (ODEs)
- Fluid Mechanics
- Optimization

### (b) **Ph.D Mathematics**

• Dynamics of Structure (Solid Mechanics)

- Numerical Methods in Ordinary Differential Equations (ODEs)
- Fluid Mechanics
- Optimization

### (iii) Department of Physics (PHY)

### (a) M.Tech. Physics

- Condensed Matter Physics
- Electronic Measurements & Instrumentation
- Communication Physics
- Radiation and Health/Medical Physics
- Atmospheric Physics

### (b) M.Phil Physics

### (c) M.Phil/Ph.D Physics

### (d) Ph.D Physics

- Condensed Matter Physics
- Electronic Measurements & Instrumentation
- Communication Physics
- Radiation and Health/Medical Physics
- Atmospheric Physics

### (iv) Department of Statistics (STA)

### (a) M.Tech. Statistics

### (b) Ph.D Statistics

- Econometrics
- Mathematical Statistics
- Operations Research

In addition to the above, students for M.Tech. and Ph.D degree programmes may conduct research in the following areas:

- Experimental Design
- Multivariate Analysis
- Quality Control and Technometrics
- Time Series Analysis
- Sampling Techniques

### 9. INSTITUTE OF TECHNOLOGY-ENHANCED-LEARNING AND DIGITAL HUMANITIES (INTEDH)

### (a) PGD Bioethics

- (b) **PGD** Professional and Applied Ethics
  - Business Ethics
  - Environmental Ethics
  - Ethics of Governance and Public Affairs
  - (b) PGD Security and Intelligence Studies
  - (c) **PGD** English for Specific Purposes
  - (d) **PGD** Science and Development Education
  - (e) PGD Technical Communication
- (f) PGD Digital Literacy
- (g) PGD Medical Sociology
- (h) PGD Population Health

### 10. COLLABORATION WITH OTHER RESEARCH CENTRES

- (i) The University in collaboration with the Regional Centre for Training in Aerospace Surveys (RECTAS), Ile-Ife, Nigeria, offers Master in Geoinformation Technology (MGIT).
- in the following specialization
  - (i) Disaster Risk Management
  - (ii) Environmental Management
  - (iii) Land Resource Management
  - (iv) Natural Resource Management
  - (v) Hydrology and Water Resource Management
  - (vi) Meteorology and Climate Change
  - (vii) Soil Analysis and Agricultural Management
  - (viii) Health and Social Development
  - (ix) Crime Mapping, Peace and Security and Military Intelligence
  - (x) Urban Planning and Analysis
  - (xi) Geovisualisation and Mapping Technology. https://afrigist.org/
  - (ii) The University also in collaboration with African Regional Centre for Space Science and Technology Education-English (ARCSSTE-E), Ile-Ife, Nigeria (affiliated to the United Nations), offers Master of Space Science and Technology (MSST) in the following Options/specializations:
  - (a) Satellite Communication

- (b) Basic Space Physics
- (c) Satellite Meteorology, and
- (d) Remote Sensing and GIS www.arcsstee.org.ng

### **B. ADMISSION REQUIREMENTS**

- (i) Postgraduate Diploma (PGD)
  - (a) A first degree, not lower than Third Class, in the relevant discipline.
  - (b) Higher National Diploma (HND) of **at least** Lower Credit level or its equivalent in the relevant or related discipline.
  - (c) Professional qualifications acceptable in the University, such as ACA, AIB, ACCA, ACIS, or equivalent for the **Postgraduate Diploma in Computer Science only**.

# (ii) Master of Agric. Technology/Master of Engineering/Master of Technology (M. Agric. Tech./M. Eng./M. Tech.)

(M. Agric. Tech./M. Eng./M. Tech.)

- (a) A good Bachelors degree of at least **Second Class Lower Division** of The Federal University of Technology, Akure, in the appropriate discipline.
- (b) A **good** Bachelors degree of **at least Second Class Lower Division** from other recognized Universities, in the appropriate discipline.
- (c) Higher Diploma of at least Lower Credit level and in addition, the candidate must have a Postgraduate Diploma (at Upper Credit level) in the appropriate discipline.

### (iii) Master of Philosophy (M. Phil.)

For M. Phil. in advertised discipline, a good M. Tech. degree or equivalent is required in the relevant discipline.

### (iv) Doctor of Philosophy (Ph. D)

- (a) A **good** Masters degree in the appropriate discipline with a CGPA of 3.50 and/or 60% **minimum** average score.
- (b) Any other qualification approved by Senate.

### C. DURATION OF PROGRAMMES

(i) Postgraduate Diploma Programmes (PGD)

- (a) **Full-Time** students shall **normally** spend between eighteen (18) and twenty-four (24) months.
- (b) **Part-Time** students shall **normally** spend between eighteen (18) and thirty-six (36) months.
- (ii) Masters Programmes M.Agric.Tech./M.Eng./M.Tech./ Professional

Students shall **normally** be required to spend between eighteen (18) and twenty-four (24) months.

### (iii) M. Phil. Programme

- (a) Students shall **normally** be required to spend between eighteen (18) and twenty-four (24) months.
- (b) A candidate may transfer from M.Phil. to Ph.D programme after completing the course-work and fulfilling all other approved requirements.
- (iv) Doctor of Philosophy (Ph.D) Programme
  - (a) **Full-Time** candidates may defend their theses between thirty-six (36) and forty-eight (48) months.
  - (b) **Part-Time** candidates may defend their theses between forty-eight (48) and sixty (60) months.

Note: Applicants are no longer required to present O'Level results for postgraduate admissions

### D. METHODS OF APPLICATION

(i) Candidates should process their application on-line at the University's website (http://www.futa.edu.ng), (www.arcsstee.org.ng), and (https://afrigist.org) using the REMITA method with payment made to the School of Postgraduate Studies account.

- (ii) Application forms for postgraduate programmes are sold for ₩20,000.00 (Ph.D), ₩20,000.00 (Masters), and ₩20,000.00 (PGD) only
- (iii) **Specifically**, Ph.D candidates should send their Research Proposal to <a href="mailto:spgsadmissions@futa.edu.ng">spgsadmissions@futa.edu.ng</a> using surname\_school/dept.doc e.g. **Ojo sos/che.researchproposal**

ATTN: DEPARTMENT OF...... THE FEDERAL UNIVERSITY ( TECHNOLOGY, P.M.B. 704, AKURE, ONDO STATE, NIGERIA.

NOTE: (A) ACADEMIC TRANSCRIPT WITHOUT TRANSCRIPT LABEL WILL NOT BE PROCESSED.

(B) APPLICATION FORM AND ACCEPTANCE FEES ARE NON-REFUNDABLE

### E. OPENING AND CLOSING DATES FOR APPLICATION

Application forms will be available for completion for a period of six (6) weeks beginning from 4<sup>th</sup> October to 15<sup>th</sup> November, 2021.