



German Federal
Ministry of
Education and
Research

CALL FOR APPLICATIONS West African Science Service Centre on Climate Change and Adapted Land Use

With funding from the German Federal Ministry of Education and
Research (BMBF)



2021 Admissions into PhD Programme in West African Climate Systems FULL SCHOLARSHIP AVAILABLE

The Doctoral Research Programme in West African Climate Systems (DRP-WACS) of the West African Science Service Centre on Climate Change and Adapted Land Use (WASCAL) hosted at the Federal University of Technology, Akure (FUTA), Nigeria, seeks to admit the fifth batch of students for the PhD programme in the field of West African Climate Systems and its applications.

WASCAL is a West African international organization with focus on academic and multidisciplinary research, building graduate-level scientific capacity and serving policy makers in West Africa with science-based advice on adaptation to climate change impacts and land use management. It cooperates with many agencies and universities in the West African region, providing a knowledge platform of excellence for its partners. WASCAL is funded by the German Federal Ministry of Education and Research (BMBF), multilateral and bilateral partners and its 11 West African member countries, namely Benin, Burkina Faso, Cabo Verde, Cote d'Ivoire, Ghana, Mali, Niger, Nigeria, Senegal, The Gambia and Togo.

The host department in FUTA, the Department of Meteorology and Climate Science is recognized by the World Meteorological Organisation (WMO) as the University

component of the Regional Meteorological Training Centre in Nigeria. The department is renowned in the country and the entire West Africa for its track records in manpower development of experts in weather and climate related disciplines. Over the years, the department has trained professional meteorologists for Meteorological Agencies in Nigeria, Ghana, the Gambia, Tanzania, Uganda, Kenya, etc. It has also trained scientists and experts in other climate related fields. In close collaboration with the department, DRP-WACS has successfully trained and empowered individuals across West Africa who are now consultants to organizations such as the World Meteorological Organization (WMO), World Bank (WB) and the Intergovernmental Panel on Climate Change (IPCC).

Over forty West African students have benefitted from the full scholarship scheme which includes accommodation, tuition, travel and cost of research. These graduates have been providing improved prediction, adaptation and management of the climate system over West Africa and beyond.

The main goal of the programme is to build capacity in climate science, applications and risk management aimed at solving climate-related socio-economic challenges in Africa. The programme is geared towards producing professional personnel equipped with the research and technological skills to manage climate related issues in priority areas such as health, water, energy, agriculture (food security) and disaster risk reduction. The PhD programme is thus primed to bridge skills gaps by providing transformative climate management solutions to atmospheric, agriculture, water resources, health, coastal, urban issues, environmental and other socio-economic problems occasioned by the interplay of extreme weather and climate. Students are expected to carry out original research projects and to specialise in any of the following areas:

- (i) Numerical Weather Prediction and Forecasting
- (ii) Climate Change Applications
- (iii) Agricultural Meteorology
- (iv) Satellite Meteorology, Instrumentation, Remote Sensing and GIS Applications in Meteorology
- (v) Coastal Risk Management
- (vi) Urban Climatology and Air Quality
- (vii) Biometeorology (Health)
- (viii) Water Resources Systems
- (ix) Renewable Energy
- (x) Synoptic Meteorology
- (xi) Environmental Pollution, etc.

Scholarship and Research Support

The Graduate Research Programme is fully funded by the German Federal Ministry of Education and Research (BMBF). The scholarship includes:

- (i) Monthly stipend to cover accommodation, and living expenses for the period of studies;
- (ii) Travel;
- (iii) Payment of university fees;

- (iv) Research grant;
- (v) A laptop computer.

Other Sources of Funding

Apart from WASCAL scholarship, students with other sources of funding (e.g. TEFUND, PTF, Governmental support, NGOs, other scholarship supports and self) are welcome. Such students will pay tuition fees. They will also pay for accommodation and take care of living expenses.

Eligibility

1. The programme will give full scholarships to selected applicants from 11-member WASCAL countries with the best results.
2. Applications are invited from qualified candidates from the broad spectrum of Meteorology, Climate Science, Climatology, Geography, Atmospheric Physics, Agriculture, Hydrology and Water Resources Management, Mathematics or any other related discipline.
3. Candidates are required to have Masters' degree in Meteorology, Climate Science, Climatology, Atmospheric Physics, Geography, Mathematics, Agriculture, Hydrology and Water Resources Management or other relevant disciplines with an average grade of at least 60% in their Masters Programme.
4. Candidates must possess at least, a Second-Class division in the First Degree.
5. Candidates must possess five (5) 'O' level credits as required in relevant subjects which must include English Language, Physics and Mathematics (*le bac scientifique avec l'anglais et le math*) that are equivalent to Anglophone university grading system. Proficiency test in English language (e.g. TOEFL) would be an advantage.
6. Candidates must be citizens of WASCAL member countries (Nigeria, Senegal, The Gambia, Cote d'Ivoire, Republic of Benin, Togo, Ghana, Niger, Burkina Faso, Cape Verde and Mali).
7. Candidates must accompany their application with a research proposal addressing issues of climate change in the region, and a one-page letter of motivation. If admitted, the proposal will be fine-tuned under the guidance and mentorship of supervisors.
8. Computer programming and climate science skills would be advantageous but NOT necessarily prerequisites.

Other Requirements

- (i) Basic knowledge in meteorology, climate science, and related fields as well as research experience in these fields.
- (ii) Strong computational and analytical skills; research methodology and scientific writing skills.
- (iii) Excellent oral and written communication skills.

- (iv) This programme is a PhD by research. Thus, applicants must be able to demonstrate capacity for independent work and as well as good team spirit.
- (v) Intellectual capacity, maturity, effective decision making and problem-solving potentials.
- (vi) Proficiency in English language as the programme will be conducted in English.
- (vii) Candidates are expected to publish at least, 2 papers from own research findings in reputable international peer-reviewed journals before qualifying to graduate.

Programme Duration and Structure

The PhD programme is a full-time programme with a duration of 36 months. It has the following components:

| S/N | Activity | Duration |
|------------|---|-----------------|
| (i) | Pre-doctoral programme Language Course (English/French) | 4 Months |
| (ii) | Lecture Component | 6 Months |
| (iii) | Field/Research Work | 24 Months |
| (iv) | Research Visit to Germany | 6 Months |
| (v) | Final Thesis write-up and Defense | 6 Months |

The following are the criteria for students to remain in the programme:

1. Sustenance of a minimum graduate level Grade Point Average (GPA) equivalent to a minimum of B grade (60%) from each course.
2. During the academic course phase, students will be required to develop a detailed research programme, including the budget, that has to be accepted by a supervisory committee, consisting of graduate faculty members and endorsed by the Advisory Board.
3. During the research phase, students are expected to present their progress reports regularly and be evaluated in accordance with WASCAL and FUTA Postgraduate School regulations.

Application Process and Requirements

All applicants are required to fill the application form online at:

<http://www.futa.edu.ng/wascal/home>

- (a) The following documents (checklist) are required for the application and are to be submitted online:
- 1) Detailed resume or curriculum vitae;
 - 2) Three (3) referees and their email addresses, one of whom must be your M.Sc supervisor;
 - 3) Test scores for GRE or TOEFL or both as proof of English proficiency (if applicable);
 - 4) Academic transcripts of BSc, MSc or MTech. degrees (with the official English translations if the documents are not in English).
 - 5) Evidence of current and previous employments (if applicable)
 - 6) Photocopies of official certificates for BSc, MSc or MTech degrees
 - 7) Two recent passport-sized photographs
 - 8) A short concept note on your research proposal (max. 3 pages) outlining the justification, objectives, methodology and expected outcomes of the research idea.
 - 9) Letter of motivation (max. two pages) outlining the following:
 - (i) Why you want to study Meteorology and Climate Science at the PhD level and at DRP-WACS.
 - (ii) How your home country and the sub-region would benefit from your training
 - (iii) Any other relevant information and/or experience to support your application.

Application Deadline: June 30, 2021

Only shortlisted applicants will be invited for interview and the date will be communicated to shortlisted applicants in due course.

For further enquiries, you contact the following persons:

1. **Deputy Director**, DRP-WACS: depsdir_wascal@futa.edu.ng; Phone: +2348149553092
2. **Scientific Coordinator**: coordinator_wascal@futa.edu.ng; phone: +2349067463403
3. **Information Technology Officer**: infotech_wascal@futa.edu.ng; +2348062960160.

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