An online postgraduate programme to strengthen youth entrepreneurship capacities on the continent







# About

### **Programme qualification**

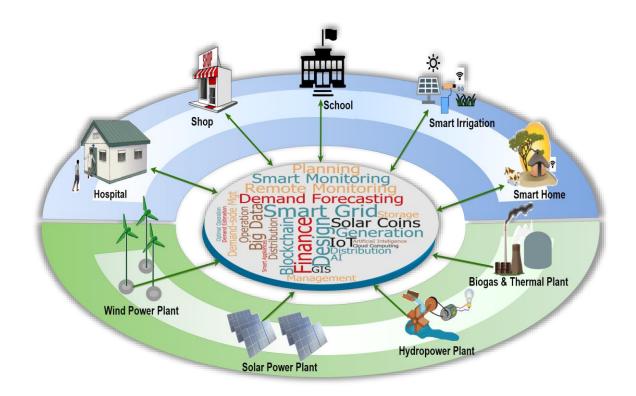
Pan African University Mini-grid, Digitalization Entrepreneurship programme (PAU-MDE)

### The PAU-MDE

The PAU-MDE programme is a new online postgraduate programme the Pan African University Institute for Water and Energy Sciences (including Climate Change) (PAUWES) developed with the support of the Global e-Schools and Communities Initiative (GESCI) with the aim of strengthening youths' capacity on the continent with innovative business ideas in the mini-grid sector with, technical and entrepreneurial skills for the creation of businesses and start-ups across the mini-grid value chain in the African continent.

The programme is hosted by the **Pan African Virtual and E-University**, one of the flagship projects of the African Union established to foster the development of human capital, science, technology and innovation through increasing access to tertiary and continuing education in Africa.

The PAU-MDE is a program designed around an entrepreneurship incubator curriculum which integrates actors, stakeholders and features of innovation and entrepreneurship ecosystems with strengths of higher education systems to develop skills and competences for the setup of start-ups and business cases in a flexible and agile manner on the continent.



# Overview

### **Programme overview**

The programme is built around three layers as represented in the diagram.

- The **first layer** in the center which is transversal, and covers innovation and entrepreneurship skills and knowledge;
- The second layer highlights the main functionalities of mini-grid grouped in two main clusters: Operation & Maintenance and System & Technical functionalities;
- The third layer presenting the different courses offered by the programme aiming at developing specific digital-based capacity and skills applicable to a specific functionality of mini-grid, in which the students would develop their entrepreneurial business cases and prototypes.

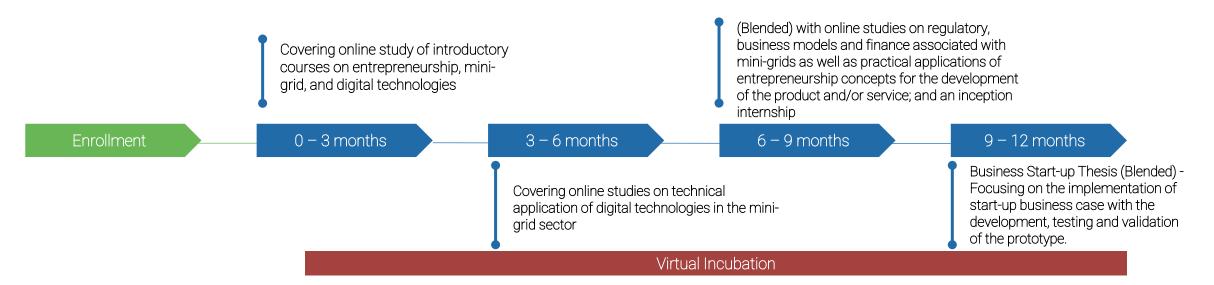
### **Programme Duration**

The programme is designed for a period of **four terms** duration.

eCourse 103 Mini-grid business model and finance eCourse 104 Policy Regulations and Standards of Mini-Micro Grids FINANCE eCourse 102 Design Planning and - Crowd funding Design Planning Operation of Mini-Grids - Solar coins and Operation of Mini-Grids LANNING & OPERATIONAL FUN eCourse 201 Frontier/Digital Technologies, and ICT Infrastructure Innovation & in Smart Grid Entrepreneurship eCourse 101 Energy Production - Generation and SYSTEM & TECHNICAL FUR Remote monitoring - SCADA/loT eCourse 203 eCourse 203 IoT and Coding for IoT and Coding for Mini- Grid OISTRIBUTION & CONTRO Mini-Grid solutions eCourse 204 eCourse 204 Data Management and Data Management and Smart Grid Analytics Smart Grid Analytics eCourse 202 Advanced Power Electronics Applications eCourse 203 IoT and Coding for Microgrid solutions Frontier/Digital Technologies, and ICT Infrastructure in Smart eCourse 204 Data Management and Smart Grid Analytics

# At a glance

### The programme structure





The programme uses **problem-based** and **experiential learning**, following a blended approach that combines online lectures, tutorials, assignments and practical exercises.



The programme is offered using English as instruction language.



The programme is **accessible** across the continent



Dedicated mentorship support throughout the programme from industry experts and practitioners on the continent



Students connected to an Entrepreneurship Community (**Virtual incubator**) built around the programme to develop their business ideas

# Admission Requirements

- Be an African citizen
- Maximum age of 35 years for both male and female applicants
- Master\* degree from a recognized university in a relevant field (renewable energy, energy, ICT with background in energy, etc.)
- An innovative business idea across the mini-grid value chain or ICT application to energy
- A recommendation letter from at least one university lecturer
- Be computer literate (use of internet, computer, etc.
- Be fluent in English

\* An undergraduate university degree in renewable energy or energy related sector may also be considered

Female candidates are highly encouraged to apply.

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## Why choosing the programme

### An environment to develop expertise in the mini-grid and digital technologies nexus

- Cutting edge technical knowledge and skills to implement innovative solutions in the energy access sector to drive the economic development of the continent
- Latest entrepreneurship concepts and tools for the development of successful business and start-ups on the continent

### State-of-the-Arts facilities

- Latest online learning environment with dedicated digital tools for a unique learning experience
- · Virtual incubation space to mature start-ups and business ideas
- · Access to business information related database

#### International environment

- Internationally renowned academic and private sector experts from across the continent
- Partners in the entrepreneurship ecosystem in Africa and beyond
- Cooperation with accelerators of local Tech Hubs on the continent and internationally to mature the start-up prior to their deployment into the market

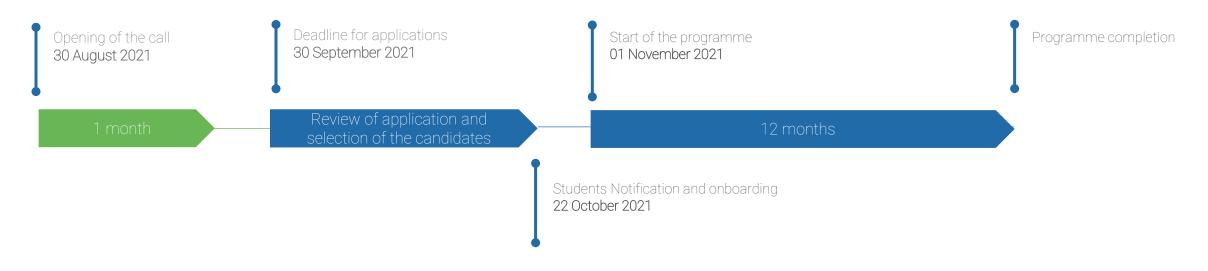
### Career perspectives/opportunities

- The programme offers students from Africa and the diaspora the chance to bring their business ideas in the mini-grid to fruition.
- With the support of the industry's experts and stakeholders of the entrepreneurship ecosystem, successful students will develop successful start-ups including Non Governmental Organisations, Social Enterprises, and businesses in the mini-grid value chain on the continent.

### **Scholarship**

 Successful and committed African candidates to the programme will be offered to take the programme free of charge. The tuition and costs associated to the purchase of specific software and equipment needed to undertake the practical class and exercises will be offered.

### **Timelines**



To apply kindly follow the link below:

https://pau-mde.org/calls/application-submission/

### Connect with us

#### The Consortium



The Pan African University Institute for Water and Energy Sciences (including Climate Change) (PAUWES) is one of the five hubs of the Pan African University; an initiative of African Union Commission to create excellence and revitalize higher education and research in Africa. Part of its core mandate is to enhance the development of programmes in this area. PAUWES capitalises on the youth's potential by developing their capacities through education, leading to entrepreneurship and the creation of start-ups. Consequently, this fosters employability on the continent.



The Global e-Schools and Communities Initiative (GESCI) is an international non-profit organisation founded on the recommendation of the United Nations Task Force on ICT. GESCI is an accredited online training provider specializing in developing curricula and skills programmes that promote entrepreneurship. It envisions a world with widespread use of digital technologies to achieve a higher level of inclusiveness and equality, making use of ICT in the provision of services, including skills development for youth enterprise and employment.

#### **Contacts**

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