



MACHAKOS UNIVERSITY
OFFICE OF THE DEPUTY VICE-CHANCELLOR
(RESEARCH, INNOVATION AND LINKAGES)

A Preferred University of Excellence in Scholarship and Service Delivery

Machakos University Students' Innovation Challenge

Third Call for Students' Innovation Proposals, 2019/2020

THEME: RESEARCH, INNOVATION AND TECHNOLOGY FOR INDUSTRIAL GROWTH AND SUSTAINABLE DEVELOPMENT

1. INTRODUCTION

Machakos University Student's Innovation Challenge is an annual call that seeks to offer student opportunities to make solid contributions towards socio-economic growth and sustainable development. The challenge is an opportunity for Machakos University students to strengthen their innovation and entrepreneurial skills. Students are asked to submit proposal(s) formulated in line to the theme as provided in the call. A panel then selects finalists from all the received application, who are invited to pitch their ideas to a select audience and thereafter make funding decisions.

2. SUB-THEMES

- a. Agriculture, food and nutrition security;
- b. Health, Sports and Tourism; (Hot topic: Cancer)
- c. Education and Ethical issues in research and product development.
- d. Housing, Transport, Energy and Industrialization;
- e. Environment, Natural resources and Climate change;
- f. Mathematics, Statistics & Data Science; Basic and Applied Sciences;
- g. Language, Culture, Social Equity and Governance;
- h. Business, Entrepreneurship and SMEs;

3. ABOUT THE THIRD CALL FOR STUDENT INNOVATION PROPOSALS

Under the theme: Research, Innovation and Technology for Industrial Growth and Sustainable Development, students are invited to submit proposals for Innovation projects that are driven by societal challenges within the thematic scope of this call. The Call seeks to support Innovation proposals with strong potency towards catalyzing investment and innovation to create new economic opportunities as well as expanding the existing ones.

Applicants need to demonstrate their ability to exploit Research, Innovation and Technological potential to support a robust Industrial Growth for sustainable development. And also to give details in their proposal on how such innovation will contribute to at least one of the Kenya's Big Four Agenda.

4. OBJECTIVES OF THE CALL

The objectives of this call are to:

- i. Promote students' creativity and participation towards social and economic development
- ii. Generate tangible prototypes and proven services to increase the university competitiveness in innovation
- iii. Provide an opportunity for students to actualize and patent their innovations.
- iv. Contribute towards the realization of the national, regional and global agenda

5. PERIOD OF FUNDING

Each proposal will be funded for a period of up to 1 year. Successful applicants are expected to adhere to their approved budget, work plan and expected project completion date.

6. PROPOSAL SUBMISSION

A soft copy and three (3) copies of the proposals should be submitted to the Director, Research, Innovation and Technology, the deadline for submission extended to **19th November, 2019**. Incomplete applications as well as applications submitted after the deadline will not be considered. Soft copies should be submitted through the email address: director-research@mksu.ac.ke and copied to registrar-ril@mksu.ac.ke

NOTE:

- Students are encouraged to collaborate and apply as pairs or small groups from different disciplines. The lead innovator in this case should be identified.
- The application forms are available at Machakos University website: www.mksu.ac.ke students' portal
- Each application must be signed by a supervisor and endorsed by the Chairman of Department and School where principal innovator belongs.
- Each proposal will be supported with a maximum budget of **KES. 100,000/=**.

7. PROPOSAL FORMAT

Applicants are required to fill the application form attached to this calls or download from students portal under www.mksu.ac.ke. The form should be filled in Times New Roman, font size 12. It must contain the following sections dully filled as outlined in the application form:- (i) Title of the project (ii) Principal Innovator (iii) Co-Innovator(s) (iii) Background information (iv) Summary Description of Innovation (v) Advantages and Unique Features of the Innovation (vi) Sale of the Innovation (vii) Innovation History (viii) Declaration

8. ELIGIBILITY

This is a competitive innovation grant managed by Machakos University's Division of Research, Innovation and Linkages (RIL) through the Directorate of Research, Innovation and Technology (DRIT). To be eligible:

- a) The applicant must be a bona fide student of Machakos University.
- b) The proposals must demonstrate:
 - i. Contribution towards new/improved quality product
 - ii. Contribution towards improved production processes
 - iii. Potential for patenting
 - iv. Positive impact to the society.
- c) Students with on-going Machakos University funded innovation projects are not eligible.
- d) Applications must be received before/on the stated deadline at 5 pm.

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STUDENT'S INNOVATION DISCLOSURE FORM

c) Title of Innovation/Project:

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d) Principal Innovator/inventor

Name (Contact Person):		School:
Department:		Registration No:
Inventorship share (%):		Telephone:
Signature:		Email:

3. Co-Innovators/Inventor(s)

Co-Innovator/Inventor - 1

Name:		School:
Department:		Registration No.:
Inventorship share (%):		Telephone:
Signature:		Email:



Co-Innovator/Inventor - 2

Name:		School:
Department:		Registration No.:
Inventorship share (%):		Telephone:
Signature:		Email:

Co-Innovator/Inventor - 3

Name (Person to whom inquiries should be made):		School:
Department:		Registration No.:
Inventorship share (%):		Telephone:
Signature:		Email:

Note to Principal Innovator/Inventor: For more Co-innovators/inventors, please add separate sheet.

ii. Summary Description of Innovation/Invention (Enclose sketches, drawings, photographs, screen prints and other materials to help illustrate the description).

(Please use additional sheet if necessary)

5. General Purpose of Innovation/invention

6. Commercial Application of Innovation/invention

b A) Advantages and Unique Features of innovation/Invention

ii. Please identify the novel and unique features of the innovation/invention.

e) How does it differ from the existing technology?

iii. What problem does it solve or what advantages does it possess?

B) Alternate Technologies

Describe alternate technologies/products which you are aware of accomplishing the same purpose as this invention, along with the companies that market, manufacture or make use of them.

8. Do you have any Plans to patent? If yes, when?

9. Innovation/Invention History

ITEM	DATE	Place, Reference, Comments
A – Initial idea		
B – Description of complete invention, oral or written		
C – First successful demonstration (reduction to Practice)		
D- First publication (article, theses, oral presentation, abstracts, poster)		
E – Disclosures to industry		
F- Other disclosures		
G- Is it related to other inventions?		
H- Are your lab books and other records in order and available?		

10. Proposed Budget

Please provide possible budget towards the costs of your proposed innovation/project

11. Endorsement and signatures

a) Principal Applicant

I, _____ (Principal Inventor), acknowledge that to the best of my Knowledge there are no other co-inventors to this invention.

Signature of Principal Investigator

b) Mentor/Supervisor Department of _____

Name of Mentor/supervisor: _____ Signature _____ Date _____

c) Chairperson, Department of _____

Name of Chairman: _____ Signature _____ Date _____

d) Dean, School of _____

Name of Dean: _____ Signature _____ Date _____