

**TERMS OF REFERENCE
AMENDMENT 1
INDIVIDUAL CONSULTANT/FIRMS**

**STEM Education Consulting for Public Schools
STEM Americas - PADF
Remote**

1. BACKGROUND AND JUSTIFICATION:

The Pan American Development Foundation (PADF) is committed to strengthening STEM (Science, Technology, Engineering and Mathematics) education in Latin America. Our goal is to improve employability and workforce development through innovative STEM methodologies. This consultancy seeks to develop a STEAM curriculum for public high school students (ages 12-18), focused on the development of skills for employment.

2. OBJECTIVE:

The overall objective of the consultancy is to design a comprehensive STEAM (Science, Technology, Engineering, Arts and Mathematics) curriculum of approximately 20-25 modules that prepares students for the current and future job market. This curriculum should include teacher guidelines, hands-on activities, thematic modules, ideas for experiments, discussion questions, and sample assessments. The curriculum must be designed exclusively by the consultant and for PADF. The curriculum must be designed and completed in a maximum time of 3 months or 90 days.

This consultancy responds directly to the following activity of the STEM Americas program: **Development of curriculum and educational materials for the implementation of STEAM in secondary education.**

3. RESPONSIBILITIES OF THE CONSULTANT:

- a) To develop a STEAM curriculum tailored to the needs of high school students (ages 12-18) in Latin America.
- b) Create between 20-25 or more STEAM modules, incorporating practical and theoretical skills, with an emphasis on employability.
- c) Create and incorporate detailed lesson plans that incorporate general STEAM methodologies for employability, which apply to the Latin American context and community needs, as well as provide specific activities for PADF's STEM Americas subprograms (STEM for Oceans, STEM for Aerospace, STEM for Health, STEM for Sustainability, STEM for Agriculture, etc.).
 - a. Incorporate "quick tips" guidance for potential activities and lesson plans for STEM Americas sub-brands, so that the curriculum is versatile to add specific themed activities related to STEAM.
- d) Provide guidelines and teaching materials to support teachers to implement the curriculum effectively in their classrooms (whether during school or extracurricular hours and for students from different backgrounds and for students with disabilities). The curriculum should be created not to train teachers, but to provide them with guidance on how to implement these lesson plans in their classrooms.

- e) Develop practical activities, experiments, and examples of assessments that align with curriculum objectives, as well as share best practices so that teachers can measure monitoring indicators in their classrooms.
- f) Collaborate with the STEM Americas team to ensure that the curriculum meets local and international educational standards.
- g) Present to the PADF team, the methodological approach of the curriculum, as well as its structure, development and implementation.

The consultant should not be responsible for the graphic design of the curriculum, but if any activity requires visual instruments, he/she must design them (e.g. tables, graphs, infographics, etc.).

4. PLACE(S) OF ASSIGNMENT

Remote work, with possible workshops and online training.

5. CANDIDATE/FIRM PROFILE:

The ideal candidate must possess the following:

- Bachelor's degree in education, Science, Engineering, or a related field. A master's degree or equivalent experience is preferred.
- At least 5 years of experience in curriculum development or teaching in STEAM.
- Specialized knowledge in STEAM teaching methodologies and in the educational context of Latin America.
- Fluency in English. Knowledge of Spanish and Portuguese will be an asset.

In addition to the above qualities, the successful candidate must demonstrate:

- Previous experience in international educational projects or in multicultural environments.
- Capacity for innovation and adaptation to diverse educational contexts.
- Effective communication skills and collaboration with multidisciplinary teams.

6. CONTRACTUAL MECHANISM: FIXED PRICE

Expected rate for the finished deliverable(s). Provide a detailed list of each product, its cost, and the justification for the price. (All applicable Taxes, Fees and other costs must be included in the price proposal.)

The curriculum proposal for this consultancy may not exceed USD\$ 15,000.

Please include the following information regarding your rate with your request:

- Expected rate for the finished deliverable(s). Provide a detailed list of each product, its cost, and the justification for the price.

DELIVERABLE TABLE					
No.	Date of Completion	Deliverable	Description	%	Amount (USD)
1	October 15, 2024	Curriculum Framework and Methodology	A comprehensive framework outlining the curriculum’s objectives, methodologies, and structure. It should detail the thematic areas, module outlines, and the integration of STEAM methodologies, with a focus on employability skills for students aged 12-18 in Latin America.	10%	USD\$
2	November 15, 2024	Module 1-5: Draft Curriculum Modules	Development of the first set of 5 curriculum modules. Each module should include detailed lesson plans, hands-on activities, thematic content, experiments, discussion questions, and sample assessments, aligned with curriculum objectives and local educational standards.	40%	USD\$
		Module 6-10: Draft Curriculum Modules	Development of the second set of 5 curriculum modules, with similar content and structure as the first set, incorporating feedback from the STEM Americas team if necessary.		
3	December 15, 2024	Module 11-15: Draft Curriculum Modules	Development of the third set of 5 curriculum modules, continuing the approach outlined in the first two sets, ensuring comprehensive coverage of STEAM topics and alignment with employability skills for high school students.	40%	USD\$
		Module 16-20: Final Curriculum Modules	Development of the final set of 5 curriculum modules, with a focus on refining and integrating feedback from earlier deliverables. This set should ensure that the curriculum is cohesive, comprehensive, and adaptable to the Latin American context.		
4	January 15, 2025	Final Review and Adjustments	A final review of the entire curriculum, incorporating any final adjustments or revisions based on feedback from PADF and local educators. This deliverable includes ensuring that all modules are aligned, and that teaching materials and assessment tools are effective and practical.	10%	USD\$
TOTAL				100%	USD \$15,000

The consultant/firm should provide a pricing model for each deliverable listed in the table above under: **USD\$ Amount.**

7. DOCUMENTS OF THE PROPOSAL TO BE INCLUDED:

- Attach your resume (CV) to demonstrate how you meet the requirements of the terms of reference.
- Include descriptions or a sample of previous similar projects or assignments and at least three client references.
- A Cover letter explaining a work schedule based on the deliverable table above.

8. DURATION OF THE CONTRACT:

Estimated contract start date September 15, 2024. The contract will have an approximate duration of 3 months or 90 days.

9. PARTICIPATION DATA:

- a) Applications must be received no later than September 15, 2024. All application materials must be sent kcarter@padf.org with a copy to mstjohn@padf.org, following the guidelines indicated in these Terms of Reference.
- b) Bid validity: 90 days from the submission deadline.
- c) Amendments: At any time prior to the deadline for submission of proposals, PADF may, for any reason, amend the Terms of Reference document by means of an amendment that will be published on the PADF website and/or communicated by email.
- d) Clarifications: Questions can be sent to kcarter@padf.org with a copy to mstjohn@padf.org. The subject line of the email must contain the number and title of the terms of reference.

10. TERMS AND CONDITIONS:

Result of the award

These Terms of Reference (TOR) do not obligate PADF to perform a contract, nor do they commit PADF to pay any costs incurred in the preparation or submission of proposals. In addition, PADF reserves the right to reject any and all offers, if such action is deemed to be in the best interest of PADF. PADF, in its sole discretion, will select the winning proposal and is not obligated to share the results of the individual evaluation.

Confidentiality

All proprietary information provided by the bidder will be treated as confidential and will not be shared with potential or existing applicants during the bidding process. This includes but is not limited to price quotes, cost proposals, and technical proposals. The results of the PADF assessment are confidential.