

**PROGRAM**

# **1 Creating a leading environment to promote experiential learning that is oriented to the student with STEM.**

Creating the context and leader to maintain a student oriented experiential learning.

- The environment in the classroom to promote STEM practices
- Create a collaborative environment
- Skills and actions of a teacher from the 21st-century
- The teacher is a moderator with collaborative leadership and influence.

# **2 Methodology for the application of STEM practices in class and development of the skills from the 21st-century**

Developing activities applying creativity and inquiry methods

- Applied investigation towards education
- Science Learning Cycle
- Project Based Learning
- Creativity in Education
- TIM Methodology- Torrance Incubation Model

# **3 Technology for Education and STEM Activity Design**

Knowing the capacities that technology offers in order to incorporate it in any subject and promote STEM culture

- Adopting technology and using its capabilities for a result in better learning-
- Artificial Intelligence and Python
- Coding and logical thinking in technology

# **4 Evaluation and Engineering Process for STEM Activities**

Applying evaluation tools for reviewing the progress and the process of hands on engineering learning

- STEM Activities Evaluation
- Evaluation tools for STEM projects
- Prototypes for the practice of the engineering process
- The process of engineering design as methodology for STEM activities conclusions