



## PETROSAINS RBTX CHALLENGE 2022

### Innovation Category - Varsity

#### *Rules and Regulations*

In this category, students are required to brainstorm innovative ideas and solutions based on data analytics and develop smart solutions for the relevant stakeholders.

#### 1. OBJECTIVE

- To enable tertiary students to use **Data Analytics towards meaningful decision making and outcomes.**
- To equip tertiary students to use **Descriptive, Predictive & Prescriptive Analytics skills** in reshaping organizational processes for future workforce.
- To empower our future workforce in creating **smart solutions** that are able to **meet user satisfaction**

#### 2. TEAM COMPOSITION

Each team must comprise of a maximum of **two (2) participants**. This is designed for **tertiary students (undergraduate/ postgraduate)**.

#### 3. INNOVATION CATEGORY MECHANISM

The competition is divided into **Seven (7) phases** as per the following:

**i. Registration (Phase 1)**

Participants are required to form a team comprising of two (2) members, register online and send their complete submission between 14 April – 5 June 2022. Upon registration, participants are required to join the Virtual Basecamp. However, attendance to the Virtual Basecamp will not guarantee placement in the final competition.

**ii. Virtual Basecamp (Phase 2)**

This basecamp is a learning enrichment platform for participants and shall provide an overall idea of the Petrosains RBTX Challenge Innovation Varsity competition structure, the designated challenge, as well as learning modules on Artificial Intelligence (AI), Machine Learning (ML) and its tools.

Date and mechanism will only be announced to the participants.

**iii. Proposal and Video Submission (Phase 3)**

Upon completion of the Virtual Basecamp, participants will be given 4 weeks to complete the conceptual paper and pitching video.

Participants to submit the following with: -

- a. Pitching Video: The video must be a maximum of two-minutes in duration and in MP4 format. It is also compulsory for participants to appear in the video.
- a. Conceptual Paper: Please refer to the attachment below.
- b. Link for submission <https://forms.office.com/r/pwTBxSzmbA>

**iv. Finalists Filtering Phase (Phase 4)**

The Petrosains RBTX Challenge judging committee will review the submission of complete conceptual papers and pitching videos. This shall be finalised within two (2) weeks of the closing submission date. Judges' review will be based strictly on the rubric shared during the Virtual Basecamp.

The decision of the competition judges in determining the winner for this competition shall be final and no appeals against the decision will be entertained.

**v. Bootcamp for Finalists (Phase 5)**

Finalists will be required to attend a Bootcamp which will be split into sections of learning experience enrichment. This is inclusive of technical mentoring by both subject matter experts from academia and PETRONAS. Participants are expected to complete programming within the Bootcamp period and there will be a technical evaluation from the technical advisors.

The Bootcamp will be held two (2) weeks before the Grand Finals.

**vi. Mentoring (Phase 6)**

The Mentoring phase will include a coaching session to equip finalists with relevant communication skills and familiarity towards stakeholder management. This session will be in collaboration with champion PETRONAS experts.

Each group will be given a 2-hour session via the Microsoft booking system that will be updated after the bootcamp.

**vii. Grand Finals (Phase 7)**

The teams are required to present their project findings at the Grand Finals.

Judges consisting of experts from academia and industry will evaluate the team's presentation according to the rubric shared during the Virtual Basecamp.

The presentation schedule and mechanism shall be shared to the finalists during the Bootcamp.

#### 4. JUDGING CRITERIA

The judging rubrics emphasises on Smart Solution & Functionality, Impact & Sustainability and Communication. Detailed rubrics will be shared during the Basecamp.

#### 5. THEME

Participants are required to tailor their projects to the following United Nations Sustainable Development Goals in creating a comprehensive innovative project that can contribute to a better and more sustainable future for all.

The following PETRONAS Sustainable Development Goal (SDG) includes seven-focused pillars for teams to refer to for their project ideation.



Link to United Nation Sustainable Development Goals:- [Measuring progress towards the Sustainable Development Goals - SDG Tracker \(sdg-tracker.org\)](https://sdg-tracker.org/)

#### 6. CERTIFICATIONS

Participants will be given certificates upon completion of Proposal and Video Submission (Phase 3), Finalists Filtering Phase (Phase 4), and Grand Finals (Phase 7).

**ATTACHMENT 1: TEMPLATE SAMPLE - FOR REFERENCE ONLY**

**RBTX 2021 INNOVATION CATEGORY CONCEPTUAL PAPER**

- 1. **CATEGORY:**
- 2. **INSTITUTION NAME & ADDRESS:**
- 3. **TEAM NAME:**
- 4. **PROJECT TITLE:**
- 5. **VIDEO LINK:**
- 6. **MENTOR DETAILS**
  - I. **Name:**
  - II. **Phone Number:**
  - III. **Email:**

No	Participant's Name	NRIC Number	Phone Number	Email Address
1				
2.				
3				

**1.Problem Statement**

**2. Benefit to Community**

**3. Project Significance & SDG Related**

**4. Potential SME for Project Enhancement**