REPUBLIC OF TURKEY MINISTRY OF NATIONAL EDUCATION

The General Directorate of Technical and Vocational Education

14. INTERNATIONAL MEB ROBOT CONTEST OPEN CATEGORY RULES

2020 – SANLIURFA

OBJECTIVE

It is organized for robotic projects in International Robot Competitions to provide a platform for high school and university students to realize and present their dreams, scientific ideas, abilities.

SUBJECT

It will be organized in following 3 topics;

- ✓ Biomimicry
- √ Natural Disasters
- ✓ Industrial Systems

Biomimicry: The term biomimicry comes from bios(meaning life) and mimicry(meaning to imitate). Biomimicry is an innovative dicipline that learns from nature and develops sustainable solutions by using natural design princibles, modelling systems, process and forms of nature. One of the best examples is simulation of sunflowers at solar panels. Solar panels can follow the sun autonomously to maximize energy capture from sun just like sunflowers.

Natural Disasters: To perfor tasks such as warnings, rescue, protection etc. to prevent life and property losses caused by natural disasters can be stated as basic aims of this topic.

Industrial Systems:

Technology which is developing rapidly causes a new aspect about design and production. Modeling of complex manufacturing systems, improving manufacture systems and decreasing production costs has led to increase demand for innovative approaches in system control and designs. Designs for innovative solutions of industrial systems according to criterions mentioned above can be listed in this topic.

RULES

- 1. Only students from universities, high schools and secondary schools can participate to this competition.
- 2. Teams which will particate to competition are determined in frame of general rules. Each team can participate with only one project.
- 3. Projects should be prepared according to "Project Preparing Guide-2020" in appendix-1
- 4. Projects that have participated or applied to any other project competition with the same or different names and / or with the same or similar content (subject) before the deadline are not allowed to participate in this competition. Before the deadline, such projects that are determined their participation or application to another competition with the same project will be eliminated from the competition at any stage.
- 5. Students who participate to "TUBITAK research projects contest for secondary school students" cannot apply with same project to this competition
- 6. Documents for application;
 - ✓ Project Plan (appendix 1)
 - ✓ Application form (appendix 2)
 - ✓ Declaration of commitment and ethics statement (appendix 3)
- 7. Preparing and uploading all documents are under responsible of competitors
- 8. All teams must upload all project documents (Appendix-1,2,3, pdf format) signed and stamped to robot.meb.gov.tr before 28 February 2020 for pre-evoluation.

- 9. Pre-evoulation result which listed the projects that will be invited to final competition and other conditions will be published on http://robot.meb.gov.tr on **20 March 2019**
- 10. All competitors have to follow announcements published in offical web site :http://robot.meb.gov.tr
- 11. Teams which are invited to final competition have to prepair posters, brochure, text and in necessary 3D design model of their projects.
- 12. Project should be maximum 80kg weight and its dimensions should be less than 80x140x100cm.
- 13. Competitors will present their projects in exhibition hall reserved fort his category. They will show followings to jury board;
 - ✓ Presentation
 - ✓ Project introduction in exhibition hall
 - ✓ Posters and brochures of their projects
 - ✓ Feasibility and applicability of their projects

 Jury board will evaluate and give scores according to criterions above
- 14. Scores given by jury board in exhibition hall will be announced as "first-evaluation score"
- 15. Depends on participation, jury board will invite certain number of projects to presentation room according to first-evaluation scores.
- 16. Team members have to present their project presentations in maximum 10min to jury board.
- 17. Teams have to bring all necessary equipments to show their projects to jury board.
- 18. Projects/Robots will be evaluated by expert jury members of each group according to following criterions (total score 100);
 - ✓ Innovation
 - ✓ Autonomy
 - ✓ Design (Performance, cost, simplicity)
 - ✓ Applicability
 - ✓ Actuality
 - ✓ Presentation

After evoluation process by taking into consideration of above criterions, winners (the first, second and third places) will be determined.

PRE-EVOLUATION

- 1. Projects which are prepared in accordiance with project guide will be pre-evaluated by related jury experts through their "project reports". Additional time will be given to projects that have some lacks after this evaluation.
- 2. It is expected that projects were insipired from original ideas of students. Students can get consultancy but their projects should be formed and finished with their own knowledges and competences. If it is determined that projects were not meet this expectation, competitors and advisor will be disqualified.
- 3. Projects which were invited to final competition, they will be interviewed by jury members. Computer and projection device necessary for presentation will be provided by the organisation.(All other equipments must be brought by teams)

CALENDAR

Applications	02 January 2020– 20 March 2020
Sending project documents	21 February 2020
Pre-evoluation and corrections	21 February - 06 March 2020
Announcement of pre-evoluation results	20 March 2020
Final competitions	8-9-10 April 2020