Determining Project Categories (6 total)

Please use this guide to help determine the BEST category for your project. Refer to the ISEF Website for additional information: <u>ISEF Categories</u>

1. Behavioral & Social Sciences

The study of cognitions (thought processes), emotions, behavior, and/or learning of humans and animals. BEHA may include the study of individuals, groups, and/or cultures through observational and experimental methods.

Subcategories:

- Behavioral Neuroscience
- Development
- Cognitive Psychology
- Sociology and Anthropology
- Other

2. Biochemistry & Chemistry

The study of the chemical basis of processes occurring in living organisms, including the processes by which these substances enter into, or are formed in, the organisms and react with each other and the environment.

Subcategories:

- Analytical Biochemistry
- General Biochemistry
- Medicinal Biochemistry
- Structural Biochemistry
- Other

Subcategories:

- Analytical Chemistry
- Computational Chemistry
- Environmental Chemistry
- Inorganic Chemistry
- Materials Chemistry
- Organic Chemistry
- Physical Chemistry

Other

3. Biomedical & Health Sciences

This category focuses on studies specifically designed to address issues of human health and disease. It includes studies on the diagnosis, treatment, prevention or epidemiology of disease and other damage to the human body or mental systems. Includes studies of normal functioning and may investigate internal as well as external factors such as feedback mechanisms, stress or environmental impact on human health and disease.

Subcategories:

- Cell, Organ, and Systems Physiology
- Genetics and Molecular Biology of Disease
- Immunology
- Nutrition and Natural Products
- Pathophysiology
- Other

4. Earth & Environmental Sciences

Studies of the environment and its effect on organisms/systems, including investigations of biological processes such as growth and life span, as well as studies of Earth systems and their evolution.

Subcategories:

- Atmospheric Science
- Climate Science
- Environmental Effects on Ecosystems
- Geosciences
- Water Science
- Other

5. Engineering, MATH, Robotics, & Intelligent Systems

Studies that focus on the science and engineering that involve movement or structure. The movement will be a result of forces; the structure will be stable due to the equilibrium of forces. **Subcategories:**

- Aerospace and Aeronautical Engineering
- Civil Engineering
- Computational Mechanics

- Control Theory
- Ground Vehicle Systems
- Industrial Engineering-Processing
- Mechanical Engineering
- Naval Systems

Subcategories:

- Biomechanics
- Cognitive Systems
- Control Theory
- Machine Learning
- Robot Kinematics
- Other

6. Physics & Astronomy

Physics is the science of matter and energy and of interactions between the two. Astronomy is the study of anything in the universe beyond the Earth.

Subcategories:

- Atomic, Molecular, and Optical Physics
- Astronomy and Cosmology
- Biological Physics
- Condensed Matter and Materials
- Mechanics
- Nuclear and Particle Physics
- Theoretical, Computational, and Quantum Physics
- Other