Project Categories & Subcategories

Each GSEF project is entered in one of the twenty categories below. You may optionally also select a subcategory (listed in italics). Your school, local, or regional fair may use different categories. Please check with those fairs for the appropriate category listings at that level of competition. If you are not sure which category to choose, ask yourself which group of judges would be most qualified to understand your research. **Every category listed below also has a subcategory option of "Other".**

ANIMAL SCIENCES
Animal Behavior
Cellular Studies
Development
Ecology
Genetics
Nutrition & Growth
Physiology
Systematics & Evolution

BEHAVIORAL & SOCIAL SCIENCES
Clinical & Developmental Psychology
Cognitive Psychology
Physiological Psychology
Sociology & Social Psychology

BIOCHEMISTRY
Analytical Biochemistry
General Biochemistry
Medicinal Biochemistry
Structural Biochemistry

BIOMEDICAL & HEALTH SCIENCES
Cell, Organ, & Systems Physiology
Genetics & Molecular Biology of Disease
Immunology
Nutrition & Natural Products
Pathophysiology

CELLULAR & MOLECULAR BIOLOGY
Cell Physiology
Cellular Immunology
Genetics
Molecular Biology
Neurobiology

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

COMPUTATIONAL BIOLOGY & BIOINFORMATICS
Computational Biomodeling
Computational Epidemiology
Computational Neuroscience
Computational Pharmacology
Genomics

EARTH & ENVIRONMENTAL SCIENCES
Atmospheric Science
Climate Science
Environmental Effects on Ecosystems
Geosciences
Water Science

EMBEDDED SYSTEMS
Circuits
Internet of Things
Microcontrollers
Networking & Data Communications
Optics
Sensors
Signal Processing

ENERGY: CHEMICAL
Alternative Fuels
Computational Energy Science
Fossil Fuel Energy
Fuel Cells & Battery Development
Microbial Fuel Cells
Solar Materials

ENERGY: PHYSICAL
Hydro Power
Nuclear Power
Solar
Sustainable Design
Thermal Power
Wind

ENGINEERING MECHANICS
Aerospace & Aeronautical Engineering
Civil Engineering
Computational Mechanics
Control Theory
Ground Vehicle Systems
Industrial Engineering-Processing
Mechanical Engineering
Naval Systems

ENVIRONMENTAL ENGINEERING
Bioremediation
Land Reclamation
Pollution Control
Recycling & Waste Management
Water Resources Management

MATERIALS SCIENCE
Biomaterials
Ceramic & Glasses
Composite Materials
Computation & Theory
Electronic, Optical & Magnetic Materials
Nanomaterials
Polymers

MATHEMATICS
Algebra
Analysis
Combinatorics, Graph Theory, & Game Theory
Geometry & Topology
Number Theory
Probability & Statistics

MICROBIOLOGY
Antimicrobials & Antibiotics
Applied Microbiology
Bacteriology
Environmental Microbiology
Microbial Genetics
Virology

PHYSICS & ASTRONOMY
Atomic, Molecular, & Optical Physics
Astronomy & Cosmology
Biological Physics
Computational Physics & Astrophysics
Condensed Matter & Materials
Instrumentation
Magnetics, Electromagnetics & Plasmas
Mechanics
Nuclear & Particle Physics
Optics, Lasers, Masers
Quantum Computation
Theoretical Physics

PLANT SCIENCES
Agriculture & Agronomy
Ecology
Genetics & Breeding
Growth & Development
Pathology
Plant Physiology
Systematics & Evolution

ROBOTICS & INTELLIGENT MACHINES
Biomechanics
Cognitive Systems
Control Theory
Machine Learning
Robot Kinematics

SYSTEMS SOFTWARE
Algorithms
Cybersecurity
Databases
Human/Machine Interface
Languages & Operating Systems
Mobile Apps
Online Learning