### Singapore Science and Engineering Fair 2019 Entry Form

Please refer to the SSEF website (<a href="http://www.science.edu.sg/ssef">http://www.science.edu.sg/ssef</a>) for details on the application process and all the submission requirements. All documents must be received by <a href="https://www.science.edu.sg/ssef">Wednesday, 9 January 2019, 5pm</a>.

PROJECT INFORMATION *Please refer to Annex A for the list of catego ensure that the assigned judges are familiar w	ries and sub-categories. Selecting the appropith vour research topic.	riate category and sub-category is important to					
Type of Participation:	Project Category*:	Project Sub-Category*:					
71							
Title of Research Project:							
DECLARATION BY PARTICIPANT(S)							
		rs is correct. I/We did not plagiarise					
material, forge or fabricate data, use I/We consent to the use of the info		s our own in my/our research project. rganisers for publicity purpose. I/We					
understand that all the materials I/we							
Individual / Team Leader (i.e. team	•						
Full name:	School:	School Level (E.g. Sec 3, IP4):					
Signature:	NRIC/FIN no.:	Date:					
For Team Projects:							
Team Member 2							
Full name:	School:	School Level (E.g. Sec 3, IP4):					
Signature:	NRIC/FIN no.:	Date:					
Team Member 3							
Full name:	School:	School Level (E.g. Sec 3, IP4):					
Signature:	NRIC/FIN no.:	Date:					
	-						

SCHOOL'S ENDORSEMENT					
For individual project / team projects with members from the same school					
Teacher-in-charge's full name:	Teacher-in-charge's email ad	Teacher-in-charge's email address:			
Teacher-in-charge's signature:		Date:			
SCHOOL'S ENDORSEMENT					
For team projects with members from different sch	ools				
For team member 1					
Teacher-in-charge's full name:	Teacher-in-charge's email ad	ldress:			
Teacher-in-charge's signature:		Date:			
For team member 2					
Teacher-in-charge's full name:	Teacher-in-charge's email address:				
Teacher-in-charge's signature:		Date:			
Fautaam mambau 2					
For team member 3	I <del>-</del>				
Teacher-in-charge's full name:	Teacher-in-charge's email ad	idress:			
Teacher-in-charge's signature:		Date:			

## **SSEF JUNIOR SCIENTISTS CATEGORY 2019**PARENT/GUARDIAN CONSENT FORM FOR VIDEO CONTEST

Please review the rules of the v participating in the SSEF Junior S sign below.							
I,I have read, understood and appro		) NRIC No.:	, acknow	ledge that			
I hereby give permission for any in NRIC No.:	, captured through			) used solely			
I declare that I have the authority to sign this release and that I have read and understood this agreement prior to signing it.							
PARENT'S/GUARDIAN'S SIGNAT	TURE:		DATE:				

<sup>\*</sup>delete appropriately

### ANNEX A - SSEF 2019 CATEGORIES (STATED IN BOLD AND CAPTIALISED) AND THE CORRESPONDING SUB-CATEGORIES

Please visit the website at <a href="https://student.societyforscience.org/intel-isef-categories-and-subcategories">https://student.societyforscience.org/intel-isef-categories-and-subcategories</a> for a full description and definition of the categories and sub-categories.

#### **ANIMAL SCIENCES (AS)**

Animal Behavior
Cellular Studies
Development
Ecology
Genetics
Nutrition and Growth
Physiology
Systematics and Evolution

#### **BIOCHEMISTRY (BI)**

Analytical Biochemistry General Biochemistry Medicinal Biochemistry Structural Biochemistry

#### BIOMEDICAL AND HEALTH SCIENCES (BM)

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

#### BIOMEDICAL ENGINEERING (BE)

Biomaterials and Regenerative Medicine Biomechanics Biomedical Devices Biomedical Imaging Cell and Tissue Engineering Synthetic Biology

#### CELLULAR AND MOLECULAR BIOLOGY (CB)

Cell Physiology Cellular Immunology Genetics Molecular Biology Neurobiology

#### **CHEMISTRY (CH)**

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

#### COMPUTATIONAL BIOLOGY AND BIOINFORMATICS (CO)

Computational Biomodeling Computational Epidemiology Computational Evolutionary Biology Computational Neuroscience Computational Pharmacology Genomics

# EARTH AND ENVIRONMENTAL SCIENCES (EA)

Atmospheric Science Climate Science Environmental Effects on Ecosystems Geosciences Water Science

### EMBEDDED SYSTEMS (ES)

Circuits
Internet of Things
Microcontrollers
Networking and Data
Communications
Optics
Sensors
Signal Processing

#### **ENERGY: CHEMICAL (EC)**

Alternative Fuels
Computational Energy Science
Fossil Fuel Energy
Fuel Cells and Battery
Development
Microbial Fuel Cells
Solar Materials

#### **ENERGY: PHYSICAL (EP)**

Hydro Power Nuclear Power Solar Sustainable Design Thermal Power Wind

#### ENGINEERING MECHANICS (EM)

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

### ENVIRONMENTAL ENGINEERING (EE)

Bioremediation
Land Reclamation
Pollution Control
Recycling and Waste
Management
Water Resources Management

### MATERIALS SCIENCE (MS)

Biomaterials
Ceramic and Glasses
Composite Materials
Computation and Theory
Electronic, Optical and
Magnetic Materials
Nanomaterials
Polymers

#### **MATHEMATICS (MA)**

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

#### **MICROBIOLOGY (MI)**

Antimicrobials and Antibiotics Applied Microbiology Bacteriology Environmental Microbiology Microbial Genetics Virology

### PHYSICS AND ASTRONOMY (PH)

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

#### **PLANT SCIENCES (PS)**

Agriculture and Agronomy Ecology Genetics/Breeding Growth and Development Pathology Plant Physiology Systematics and Evolution

# ROBOTICS AND INTELLIGENT MACHINES (RO)

Biomechanics Cognitive Systems Control Theory Machine Learning Robot Kinematics

### SYSTEMS SOFTWARE (SS)

Algorithms
Cybersecurity
Databases
Human/Machine Interface
Languages and Operating
Systems
Mobile Apps
Online Learning

# TRANSLATIONAL MEDICAL SCIENCES (TM)

Disease Detection and
Diagnosis
Disease Prevention
Disease Treatment and
Therapies
Drug Identification and Testing
Pre-Clinical Studies