Agriculture / Rural Development / Fisheries

Agronomy

Animal and Dairy science

Aquaculture

Aquatic biology, Hydrobiology

Fishery

Forestry

Horticulture, viticulture

Husbandry

Paper and wood

Plant breeding and plant protection

Precision agriculture

Soil management

Biotechnology

Biochemistry

Bacteriology

Bioeconomy

Biohazards, biological containment, biosafety, biosecurity

Bioinformatics

Bioproducts (products that are manufactured using biological material as feedstock) biomaterials, bioplastics, biofuels,

bioderived bulk and fine chemicals, bio-derived novel materials

Bioremediation, biodegradation

Biotechnology (non-medical), bioreactors, applied microbiology

DNA synthesis, modification, repair, recombination, degradation

Genetics and heredity

Human biology

Microbiology

Neurochemistry and neuropharmacology

Plant sciences, botany

Reproductive biology

Serology

Tissue culture

Zoology

Bioprocessing technologies (industrial processes relying on biological agents to drive the process) biocatalysis,

fermentation

Construction, Civil engineering, Infraestructures

Glass, ceramics & construction material

Architecture, smart buildings, smart cities, urban engineering

Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment

Construction engineering, Municipal and structural engineering

Low/nearly zero &-energy positive buildings

Urban studies (Planning and development)

Consumer products and services

Distribution and logistics

Electronic commerce (eCommerce)

Household products

Leisure products

Leisure services

Personal products and services

Retail, wholesale or distribution

Service innovation

Supply chain management

Textiles, apparel and luxury goods

Tourism / Travel

Earth and related environmental sciences **Environmental protection** Aquaculture Atmospheric chemistry, atmospheric composition, air pollution Circular economy Climatology and climate change Decontamination and de-pollution **Ecology Environmental and Green Technologies** Flood forecasting Geographical information systems, cartography Geo-information and spatial data analysis Geology, tectonics, volcanology Hydrology Marine biology Marine ecosystems and processes Meteorology Mineralogy Natural resources exploration and exploitation Waste management Waste recycling Wastewater treatment Water **Education and Culture** Education **Psychology** Social Media Arts (arts, history of arts, performing arts, music) Behavioural change Cultural heritage, cultural memory Design innovation Informal education Innovation and diversity (e.g. gender) Languages and Literature Life long learning Media and communications Social issues Teaching materials

Energy Biodiesel Bioenergy **Biofuels Biogas Biomass** Biomethane Domestic appliances Electricity Transmission/Distribution Electrochemistry, batteries and fuel cells **Energy Economics Energy Efficiency Energy management** Energy systems (production, distribution, application) Energy systems, smart energy, smart grids, wireless energy transfer **Fuel Production & Distribution** Hydrogen Low/zero carbon communities Natural gas **Photovoltaics** Renewable energy sources Solar cooling Solar Thermal **Engineering and technology** Manufacturing and processing Acoustics Audio engineering, reliability analysis Automation and control systems Chemical engineering, technical chemistry Communication engineering and systems telecommunications Control engineering Electrical and electronic engineering Electromagnetism Electromechanical engineering Electronics, photonics Graphene, layered material Industrial bioengineering Materials engineering Mechanical engineering Metallurgy Metrology and measurement Micro (system) engineering Nanotechnology, nano-materials, nano engineering **Novel Materials** Ocean engineering Optics (including laser optics and quantum optics) Organic electronics **Photonics Porous Materials** Production technology, process engineering Propulsion systems engineering **Robotics** Semiconductors Solid state materials Superconductivity Thermodynamics

Food and beverages Agricultural products **Brewers** Distillers and vintners Food additives Food contamination Food packaging Food preservation Food quality Food safety Food storage Food technology Secure food chain and wealth products Soft drinks Health Ageing **Biomarkers** Cardiac and Cardiovascular systems Clinical medicine Critical care medicine and Emergency medicine Dentistry, oral surgery and medicine Dermatology and venereal diseases Diagnostic tools (e.g. genetic, imaging) Drugs eHealth Endocrinology and metabolism (including diabetes, hormones) Gene therapy Geriatrics and gerontology Healthcare system Health-related biotechnology **Human** genetics **Immunology** Infectious diseases Medical devices Neurodegenerative disorders Obstetrics and gynaecology Oncology Ophthalmology Orthopaedics **Paediatrics** Pathology Patient care Personalised treatment Pharmacology and pharmacy **Psychiatry** Radiology, nuclear medicine and medical imaging Rehabilitation Respiratory systems Rheumatology Robotics for healthcare Surgery Toxicology Transplantation Urology and nephrology Vaccines Virology Wellbeing

Information and Communication Technology (ICT)

Artificial intelligence

Blockchain and Distributed Ledger Technology (DLT)

Internet of Things, embedded systems, pervasive systems

Big data

Extended Reality (XR)

Advanced computing

Algorithms and complexity

BTT5 unmanned aircraft (Drone)

Cloud computing

Communication networks, media, information society

Communication technology, high-frequency technology

Computational engineering

Computer graphics

Computer hardware and architecture

Computer sciences, information science and bioinformatics

Cryptology, security, privacy, quantum crypto

Cyber-physical systems

Cybersecurity

Data protection and privacy

Digital games, gamification, applied games, serious games

Digital services

E-learning, user modelling, collaborative systems

Fifth generation cellular network technology (5G)

Fintech (Financial technology)

Human computer interaction and interface, visualization and natural language processing

Interaction, Multimodal, Brain-Computer-Interfaces, Assistive Technologies

Internet Services & Applications

Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video)

Networks (communication networks, sensor networks, networks of robots, etc.)

Neuroimaging and computational neuroscience

Ontologies, neural networks, genetic programming, fuzzy logic

Scientific computing, simulation and modelling tools

Software engineering, operating systems, computer languages

Web and information systems, database systems, information retrieval and digital libraries, data fusion

Public sector innovation

Business model innovation

Corporate Social responsibility

Human resource management

Open data

Open innovation

Public administration innovation

Social innovation

Security Chemical, Biological, Radiological and Nuclear (CBRN) protection and decontamination equipment Crisis management Critical infrastructure, emergency systems, security, safety engineering **Detection technology** Explosives removal Forensic technologies, others Identification Information Security Technologies Interoperable secured communications (Security systems architecture) Navigation, guidance, control and tracking Networks and information security systems Protection Risk management Search and detection Surveillance **Space** Earth Observation / Services and applications Flight Dynamics / Position, Navigation, and Timing Global Satellite Navigation System (GNSS) / Services & Applications Instrumentation - telescopes, detectors and techniques Launchers **On-Board Data Systems** Orbital transportation and re-entry systems Remote sensing **RF Payload and Systems** Satellites and Probes Space data exploitation **Space Debris** Space services and products Spacecraft **Supporting Propulsion Technologies and Tools** Telecommunications **Transport & Mobility** Aircraft Avionics, Systems & Equipment AVS Airports APT Automation Automotive Logistics Maritime and infrastructure Maritime transport Multimodality Network infrastructures **Propulsion PRO** Rail infrastructure Rail Transport Road infrastructure Road transport Sea vessels Sustainable transport Transport Aviation / Air traffic management (ATM)

Transport engineering Urban transport

Vehicle Technology / Mobility