	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
iote	chnology
	Biochemistry
	Bacteriology
	Bioeconomy
	Biohazards, biological containment, biosafety, biosecurity
	Bioinformatics
	Bioproducts (products that are manufactured using biological material as feedstock) biomaterials, bioplastics, biofuel
	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
ons	truction, 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)
ons	umer 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

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
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 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 equipmentCrisis managementCritical infrastructure, emergency systems, security, safety engineeringDetection technologyExplosives removalForensic technologies, othersIdentificationInformation Security TechnologiesInteroperable secured communications (Security systems architecture)Navigation, guidance, control and trackingNetworks and information security systemsProtectionRisk managementSearch and detectionSurveillance

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