| **Field of science and technology classification** | |
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| Code | Scientific field<br>Scientific sub-field |
| 1 | Natural studies |
| 1.1 | Mathematics |
| | • Pure mathematics,<br>• Applied mathematics;<br>• Statistics and probability - This includes research on statistical methodologies, but excludes research on applied statistics which should be classified under the relevant field of application (e.g. Economics, Sociology, etc.) |
| 1.2. | Computer and information sciences |
| | • Computer sciences,<br>• Information science and bioinformatics (hardware development to be 2.2, social aspect to be 5.8); |
| 1.3. | Physical sciences |
| | • Atomic, molecular and chemical physics (physics of atoms and molecules including collision, interaction with radiation; magnetic resonances; Moessbauer effect);<br>• Condensed matter physics (including formerly solid state physics, superconductivity);<br>• Particles and fields physics;<br>• Nuclear physics;<br>• Fluids and plasma physics (including surface physics);<br>• Optics (including laser optics and quantum optics);<br>• Acoustics;<br>• Astronomy (including astrophysics, space science); |
| 1.4. | Chemical sciences |
| | • Organic chemistry;<br>• Inorganic and nuclear chemistry;<br>• Physical chemistry, Polymer science, Electrochemistry (dry cells, batteries, fuel cells, corrosion metals, electrolysis);<br>• Colloid chemistry;<br>• Analytical chemistry; |
| 1.5. | Earth and related environmental sciences |

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| | • Geosciences, multidisciplinary;<br>• Mineralogy;<br>• Paleontology;<br>• Geochemistry and geophysics;<br>• Physical geography;<br>• Geology;<br>• Volcanology;<br>• Environmental sciences (social aspects to be 5.7);<br>• Meteorology and atmospheric sciences;<br>• Climatic research;<br>• Oceanography, Hydrology, Water resources; |
| **1.6.** | **Biological sciences** |
| | • Cell biology, Microbiology;<br>• Virology;<br>• Biochemistry and molecular biology;<br>• Biochemical research methods;<br>• Mycology;<br>• Biophysics;<br>• Genetics and heredity (medical genetics to be 3);<br>• Reproductive biology (medical aspects to be 3);<br>• Developmental biology;<br>• Plant sciences, botany;<br>• Zoology, Ornithology, Entomology, Behavioral sciences biology;<br>• Marine biology, freshwater biology, limnology; Ecology; Biodiversity conservation;<br>• Biology (theoretical, mathematical, thermal, cryobiology, biological rhythm), Evolutionary biology;<br>• Other biological topics; |
| **1.7.** | **Other natural sciences** |
| 2 | **Engineering and technology** |
| **2.1.** | **Civil engineering** |
| | • Civil engineering;<br>• Architecture engineering;<br>• Construction engineering, Municipal and structural engineering;<br>• Transport engineering; |
| **2.2.** | **Electrical engineering, electronic engineering, information engineering** |
| | • Electrical and electronic engineering;<br>• Robotics and automatic control;<br>• Automation and control systems;<br>• Communication engineering and systems;<br>• Telecommunications;<br>• Computer hardware and architecture |

| 2.3. | Mechanical engineering |
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| | • Mechanical engineering;<br>• Applied mechanics;<br>• Thermodynamics;<br>• Aerospace engineering;<br>• Nuclear related engineering (nuclear physics to be 1.3);<br>• Audio engineering, reliability analysis; |
| **2.4.** | **Chemical engineering** |
| | • Chemical engineering (plants, products);<br>• Chemical process engineering; |
| **2.5.** | **Materials engineering** |
| | • Materials engineering;<br>• Ceramics;<br>• Coating and films;<br>• Composites (including laminates, reinforced plastics, cermets, combined natural and synthetic fibre fabrics; filled composites);<br>• Paper and wood;<br>• Textiles; including synthetic dyes, colours, fibres (nanoscale materials to be 2.10; biomaterials to be 2.9); |
| **2.6.** | **Medical engineering** |
| | • Medical engineering;<br>• Medical laboratory technology (including laboratory samples analysis; diagnostic technologies); (Biomaterials to be 2.9 [physical characteristics of living material as related to medical implants, devices, sensors]) |
| **2.7.** | **Environmental engineering** |
| | • Environmental and geological engineering, geotechnics;<br>• Petroleum engineering (fuel, oils), energy and fuels;<br>• Remote sensing;<br>• Mining and mineral processing;<br>• Marine engineering, sea vessels;<br>• Ocean engineering; |
| **2.8.** | **Environmental biotechnology** |
| | • Environmental biotechnology;<br>• Bioremediation, diagnostic biotechnologies (DNA chips and biosensing devices) in environmental management;<br>• Environmental biotechnology related ethics; |
| **2.9.** | **Industrial biotechnology** |

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| | • Industrial biotechnology;<br>• Bioprocessing technologies (industrial processes relying on biological agents to drive the process), biocatalysis, fermentation;<br>• Bioproducts (products that are manufactured using biological material as feedstock), biomaterials, bioplastics, biofuels, bio-derived bulk and fine chemicals, bio-derived novel materials; |
| **2.10.** | **Nano-technology** |
| | • Nano-materials [production and properties];<br>• Nano-processes [applications on nano-scale]; (biomaterials to be 2.9); |
| **2.11.** | **Other engineering and technologies** |
| | • Food and beverages;<br>• Other engineering and technologies; |
| 3 | **Medical and health sciences** |
| **3.1.** | **Basic medicine** |
| | • Anatomy and morphology (plant science to be 1.6);<br>• Human genetics;<br>• Immunology;<br>• Neurosciences (including psychophysiology);<br>• Pharmacology and pharmacy;<br>• Medicinal chemistry;<br>• Toxicology;<br>• Physiology (including cytology);<br>• Pathology; |
| **3.2.** | **Clinical medicine** |
| | • Andrology;<br>• Obstetrics and gynaecology;<br>• Pediatrics;<br>• Cardiac and Cardiovascular systems;<br>• Peripheral vascular disease;<br>• Hematology;<br>• Respiratory systems;<br>• Critical care medicine and Emergency medicine;<br>• Anaesthesiology;<br>• Orthopaedics;<br>• Surgery;<br>• Radiology, nuclear medicine and medical imaging;<br>• Transplantation;<br>• Dentistry, oral surgery and medicine;<br>• Dermatology and venereal diseases;<br>• Allergy;<br>• Rheumatology; |

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| | • Endocrinology and metabolism (including diabetes, hormones);<br>• Gastroenterology and hepatology;<br>• Urology and nephrology;<br>• Oncology;<br>• Ophthalmology;<br>• Otorhinolaryngology;<br>• Psychiatry;<br>• Clinical neurology;<br>• Geriatrics and gerontology;<br>• General and internal medicine;<br>• Other clinical medicine subjects;<br>• Integrative and complementary medicine (alternative practice systems); |
| **3.3.** | **Health sciences** |
| | • Health care sciences and services (including hospital administration, health care financing);<br>• Health policy and services;<br>• Nursing; Nutrition, Dietetics;<br>• Public and environmental health;<br>• Tropical medicine;<br>• Parasitology;<br>• Infectious diseases;<br>• Epidemiology;<br>• Occupational health;<br>• Sport and fitness sciences;<br>• Social biomedical sciences (includes family planning, sexual health, psycho-oncology, political and social effects of biomedical research);<br>• Medical ethics;<br>• Substance abuse |
| **3.4.** | **Health biotechnology** |
| | • Health-related biotechnology;<br>• Technologies involving the manipulation of cells, tissues, organs or the whole organism (assisted reproduction);<br>• Technologies involving identifying the functioning of DNA, proteins and enzymes and how they influence the onset of disease and maintenance of wellbeing, gene-based diagnostics and therapeutic interventions (pharmacogenomics, gene-based therapeutics);<br>• Biomaterials (as related to medical implants, devices, sensors);<br>• Medical biotechnology related ethics; |
| **3.5.** | **Other medical sciences** |
| | • Forensic science<br>• Other medical sciences |

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| 4 | **Agricultural sciences** |
| **4.1.** | **Agriculture, forestry and fisheries** |
| | • Agriculture;<br>• Forestry;<br>• Fishery;<br>• Soil science;<br>• Horticulture, viticulture;<br>• Agronomy, plant breeding and plant protection; (Agricultural biotechnology to be 4.4) |
| **4.2.** | **Animal and dairy sciences** |
| | • Animal and dairy science; (Animal biotechnology to be 4.4)<br>• Husbandry;<br>• Pets; |
| **4.3.** | **Veterinary sciences** |
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| **4.4.** | **Agricultural biotechnology** |
| | • Agricultural biotechnology and food biotechnology;<br>• GM technology (crops and livestock);<br>• Livestock cloning, marker assisted selection, diagnostics (DNA chips and bio sensing devices for the early/accurate detection of diseases) biomass feedstock production technologies, bio pharming;<br>• Agricultural biotechnology related ethics; |
| **4.5.** | **Other agricultural sciences** |
| *Note: 1-4 fields of sciences are defined by classification of the Organization for Economic Co-operation and Development (OECD) and (EUROSTAT).* | |