

Field of Science and Technology Classification

The classification is elaborated in compliance with „the field of science and technology classification” of OECD/EUROSTAT and covers following fields, disciplines and subdisciplines

1. Natural sciences

1.1 Mathematics

- 1.1.1 Pure mathematics
- 1.1.2 Applied mathematics
- 1.1.3 Statistics and probability (including research on statistical methodologies)

1.2 Computer and information sciences

- 1.2.1 Computer sciences
- 1.2.2 Information science and bioinformatics (hardware development to be 2.2.6)

1.3 Physical sciences

- 1.3.1 Atomic, molecular and chemical physics (physics of atoms and molecules including collision, interaction with radiation; magnetic resonances; Moessbauer effect)
- 1.3.2 Condensed matter physics (including formerly solid state physics, superconductivity)
- 1.3.3 Particles and fields physics
- 1.3.4 Nuclear physics
- 1.3.5 Fluids and plasma physics (including surface physics)
- 1.3.6 Optics (including laser optics and quantum optics)
- 1.3.7 Acoustics
- 1.3.8 Astronomy (including astrophysics, space science)

1.4 Chemical sciences

- 1.4.1 Organic chemistry
- 1.4.2 Inorganic and nuclear chemistry
- 1.4.3 Physical chemistry, Polymer science, Electrochemistry (dry cells, batteries, fuel cells, corrosion metals, electrolysis)
- 1.4.4 Colloid chemistry
- 1.4.5 Analytical chemistry

1.5 Earth and related environmental sciences

- 1.5.1 Geosciences, multidisciplinary
- 1.5.2 Mineralogy
- 1.5.3 Palaeontology
- 1.5.4 Geochemistry and geophysics
- 1.5.5 Physical geography
- 1.5.6 Geology

- 1.5.7 Volcanology
- 1.5.8 Environmental sciences (including Urban Planning and development, and Transport planning)
- 1.5.9 Meteorology and atmospheric sciences;
- 1.5.10 Climatic research;
- 1.5.11 Oceanography, Hydrology, Water resources

1.6. **Biological sciences**

- 1.6.1 Cell biology, Microbiology
- 1.6.2 Virology
- 1.6.3 Biochemistry and molecular biology
- 1.6.4 Biochemical research methods
- 1.6.5 Mycology
- 1.6.6 Biophysics
- 1.6.7 Genetics and heredity (medical genetics to be 3.1.2)
- 1.6.8 Reproductive biology (medical aspects to be 3)
- 1.6.9 Developmental biology
- 1.6.10 Plant sciences, botany
- 1.6.11 Zoology, Ornithology, Entomology, Behavioural sciences biology
- 1.6.12 Marine biology, freshwater biology, limnology; Ecology; Biodiversity conservation
- 1.6.13 Biology (theoretical, mathematical, thermal, cryobiology, biological rhythm), Evolutionary biology
- 1.6.14 Other biological topics

2. **Engineering and technology**

2.1 **Civil engineering**

- 2.1.1 Civil engineering
- 2.1.2 Architecture engineering
- 2.1.3 Construction engineering, Municipal and structural engineering
- 2.1.4 Transport engineering

2.2 **Electrical engineering, electronic engineering, information engineering**

- 2.2.1 Electrical and electronic engineering
- 2.2.2 Robotics and automatic control
- 2.2.3 Automation and control systems
- 2.2.4 Communication engineering and systems
- 2.2.5 Telecommunications
- 2.2.6 Computer hardware and architecture (including hardware development)

2.3 **Mechanical engineering**

- 2.3.1 Mechanical engineering

- 2.3.2 Applied mechanics
- 2.3.3 Thermodynamics
- 2.3.4 Aerospace engineering
- 2.3.5 Nuclear related engineering; (nuclear physics to be 1.3.4)
- 2.3.6 Audio engineering, reliability analysis

2.4 Chemical engineering

- 2.4.1 Chemical engineering (plants, products)
- 2.4.2 Chemical process engineering

2.5 Material engineering

- 2.5.1 Materials engineering
- 2.5.2 Ceramics
- 2.5.3 Coating and films
- 2.5.4 Composites (including laminates, reinforced plastics, cermets, combined natural and synthetic fibre fabrics; filled composites)
- 2.5.5 Paper and wood
- 2.5.6 Textiles; including synthetic dyes, colours, fibres; (nanoscale materials to be 2.10.1; biomaterials to be 2.9.3)

2.6 Medical engineering

- 2.6.1 Medical engineering
- 2.6.2 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

- 2.7.1 Environmental and geological engineering, geotechnics
- 2.7.2 Petroleum engineering (fuel, oils), energy and fuels
- 2.7.3 Remote sensing
- 2.7.4 Mining and mineral processing
- 2.7.5 Marine engineering, sea vessels
- 2.7.6 Ocean engineering

2.8 Environmental biotechnology

- 2.8.1 Environmental biotechnology
- 2.8.2 Bioremediation, diagnostic biotechnologies (DNA chips and biosensing devices) in environmental management
- 2.8.3 Environmental biotechnology related ethics

2.9 Industrial biotechnology

- 2.9.1 Industrial biotechnology

- 2.9.2 Bioprocessing technologies (industrial processes relying on biological agents to drive the process), biocatalysis, fermentation
- 2.9.3 Bioproducts, biomaterials, bioplastics, biofuels, bio-derived bulk and fine chemicals, bio-derived novel materials

2.10 Nano-technology

- 2.10.1 Nano-materials [production and properties]
- 2.10.2 Nano-processes [applications on nano-scale]; (biomaterials to be 2.9.3)

2.11 Other engineering and technologies

- 2.11.1 Food and beverages
- 2.11.2 Other engineering and technologies

3. Medical and health sciences

3.1 Basic medicine

- 3.1.1 Anatomy and morphology
- 3.1.2 Human genetics (including medical genetics)
- 3.1.3 Immunology
- 3.1.4 Neurosciences (including psychophysiology)
- 3.1.5 Pharmacology and pharmacy
- 3.1.6 Medicinal chemistry
- 3.1.7 Toxicology
- 3.1.8 Physiology (including cytology)
- 3.1.9 Pathology

3.2 Clinical medicine

- 3.2.1 Andrology
- 3.2.2 Obstetrics and gynaecology
- 3.2.3 Pediatrics
- 3.2.4 Cardiac and Cardiovascular systems
- 3.2.5 Peripheral vascular disease
- 3.2.6 Hematology
- 3.2.7 Respiratory systems
- 3.2.8 Critical care medicine and Emergency medicine
- 3.2.9 Anaesthesiology
- 3.2.10 Orthopaedics
- 3.2.11 Surgery
- 3.2.12 Radiology, nuclear medicine and medical imaging
- 3.2.13 Transplantation

- 3.2.14 Dentistry, oral surgery
- 3.2.15 Dermatology and venereal diseases
- 3.2.16 Allergy
- 3.2.17 Rheumatology
- 3.2.18 Endocrinology and metabolism (including diabetes, hormones)
- 3.2.19 Gastroenterology and hepatology
- 3.2.20 Urology and nephrology
- 3.2.21 Oncology
- 3.2.22 Ophthalmology
- 3.2.23 Otorhinolaryngology
- 3.2.24 Psychiatry
- 3.2.25 Clinical neurology
- 3.2.26 Geriatrics and gerontology
- 3.2.27 General and internal medicine
- 3.2.28 Other clinical medicine subjects
- 3.2.29 Integrative and complementary medicine (alternative practice systems)

3.3 Health sciences

- 3.3.1 Health care sciences and services (including hospital administration, health care financing)
- 3.3.2 Health policy and services
- 3.3.3 Nursing; Nutrition, Dietetics
- 3.3.4 Public and environmental health
- 3.3.5 Tropical medicine
- 3.3.6 Parasitology
- 3.3.7 Infectious diseases
- 3.3.8 Epidemiology
- 3.3.9 Occupational health
- 3.3.10 Sport and fitness sciences
- 3.3.11 Social biomedical sciences (includes family planning, sexual health, psycho-oncology, political and social effects of biomedical research)
- 3.3.12 Medical ethics
- 3.3.13 Substance abuse

3.4 Health biotechnology

- 3.4.1 Health-related biotechnology
- 3.4.2 Technologies involving the manipulation of cells, tissues, organs or the whole organism (assisted reproduction)
- 3.4.3 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)
- 3.4.4 Biomaterials (as related to medical implants, devices, sensors)
- 3.4.5 Medical biotechnology related ethics

- 3.5 Other medical sciences**
 - 3.5.1 Forensic science
 - 3.5.2 Other medical sciences

4. Agricultural sciences

4.1 Agriculture, forestry and fisheries

- 4.1.1 Agriculture
- 4.1.2 Forestry
- 4.1.3 Fishery
- 4.1.4 Soil science
- 4.1.5 Horticulture, viticulture
- 4.1.6 Agronomy, plant breeding and plant protection (Agricultural biotechnology to be 4.4)

4.2 Animal and dairy sciences

- 4.2.1 Animal and dairy science (Animal biotechnology to be 4.4)
- 4.2.2 Husbandry
- 4.2.3 Pets

4.3 Veterinary sciences

- 4.3.1 Veterinary sciences

4.4 Agricultural biotechnology

- 4.4.1 Agricultural biotechnology and food biotechnology
- 4.4.2 GM technology (crops and livestock)
- 4.4.3 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
- 4.4.4 Agricultural biotechnology related ethics

4.5 Other agricultural sciences