

# ALLEGATO 1

## Physical Sciences and Engineering

### PE1 Mathematics

All areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics

- PE1\_1 Logic and foundations
- PE1\_2 Algebra
- PE1\_3 Number theory
- PE1\_4 Algebraic and complex geometry
- PE1\_5 Lie groups, Lie algebras
- PE1\_6 Geometry and global analysis
- PE1\_7 Topology
- PE1\_8 Analysis
- PE1\_9 Operator algebras and functional analysis
- PE1\_10 ODE and dynamical systems
- PE1\_11 Theoretical aspects of partial differential equations
- PE1\_12 Mathematical physics
- PE1\_13 Probability
- PE1\_14 Mathematical statistics
- PE1\_15 Generic statistical methodology and modelling
- PE1\_16 Discrete mathematics and combinatorics
- PE1\_17 Mathematical aspects of computer science
- PE1\_18 Numerical analysis
- PE1\_19 Scientific computing and data processing
- PE1\_20 Control theory, optimisation and operational research
- PE1\_21 Application of mathematics in sciences
- PE1\_22 Application of mathematics in industry and society

### PE2 Fundamental Constituents of Matter

Particle, nuclear, plasma, atomic, molecular, gas, and optical physics

- PE2\_1 Theory of fundamental interactions
- PE2\_2 Phenomenology of fundamental interactions
- PE2\_3 Experimental particle physics with accelerators
- PE2\_4 Experimental particle physics without accelerators
- PE2\_5 Classical and quantum physics of gravitational interactions
- PE2\_6 Nuclear, hadron and heavy ion physics
- PE2\_7 Nuclear and particle astrophysics
- PE2\_8 Gas and plasma physics
- PE2\_9 Electromagnetism
- PE2\_10 Atomic, molecular physics
- PE2\_11 Ultra-cold atoms and molecules
- PE2\_12 Optics, non-linear optics and nano-optics
- PE2\_13 Quantum optics and quantum information
- PE2\_14 Lasers, ultra-short lasers and laser physics
- PE2\_15 Thermodynamics
- PE2\_16 Non-linear physics
- PE2\_17 Metrology and measurement
- PE2\_18 Equilibrium and non-equilibrium statistical mechanics: steady states and dynamics

### **PE3 Condensed Matter Physics**

Structure, electronic properties, fluids, nanosciences, biological physics

- PE3\_1 Structure of solids, material growth and characterisation
- PE3\_2 Mechanical and acoustical properties of condensed matter, lattice dynamics
- PE3\_3 Transport properties of condensed matter
- PE3\_4 Electronic properties of materials, surfaces, interfaces, nanostructures
- PE3\_5 Physical properties of semiconductors and insulators
- PE3\_6 Macroscopic quantum phenomena, e.g. superconductivity, superfluidity, quantum Hall effect
- PE3\_7 Spintronics
- PE3\_8 Magnetism and strongly correlated systems
- PE3\_9 Condensed matter – beam interactions (photons, electrons, etc.)
- PE3\_10 Nanophysics, e.g. nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics
- PE3\_11 Mesoscopic quantum physics and solid-state quantum technologies
- PE3\_12 Molecular electronics
- PE3\_13 Structure and dynamics of disordered systems, e.g. soft matter (gels, colloids, liquid crystals), granular matter, liquids, glasses, defects
- PE3\_14 Fluid dynamics (physics)
- PE3\_15 Statistical physics: phase transitions, condensed matter systems, models of complex systems, interdisciplinary applications
- PE3\_16 Physics of biological systems

### **PE4 Physical and Analytical Chemical Sciences**

Analytical chemistry, chemical theory, physical chemistry/chemical physics

- PE4\_1 Physical chemistry
- PE4\_2 Spectroscopic and spectrometric techniques
- PE4\_3 Molecular architecture and Structure
- PE4\_4 Surface science and nanostructures
- PE4\_5 Analytical chemistry
- PE4\_6 Chemical physics
- PE4\_7 Chemical instrumentation
- PE4\_8 Electrochemistry, electrodialysis, microfluidics, sensors
- PE4\_9 Method development in chemistry
- PE4\_10 Heterogeneous catalysis
- PE4\_11 Physical chemistry of biological systems
- PE4\_12 Chemical reactions: mechanisms, dynamics, kinetics and catalytic reactions
- PE4\_13 Theoretical and computational chemistry
- PE4\_14 Radiation and Nuclear chemistry
- PE4\_15 Photochemistry
- PE4\_16 Corrosion
- PE4\_17 Characterisation methods of materials
- PE4\_18 Environment chemistry

### **PE5 Synthetic Chemistry and Materials**

New materials and new synthetic approaches, structure-properties relations, solid state chemistry, molecular architecture, organic chemistry

- PE5\_1 Structural properties of materials
- PE5\_2 Solid state materials chemistry
- PE5\_3 Surface modification
- PE5\_4 Thin films
- PE5\_5 Ionic liquids
- PE5\_6 New materials: oxides, alloys, composite, organic-inorganic hybrid, nanoparticles
- PE5\_7 Biomaterials synthesis

- PE5\_8 Intelligent materials synthesis – self assembled materials
- PE5\_9 Coordination chemistry
- PE5\_10 Colloid chemistry
- PE5\_11 Biological chemistry and chemical biology
- PE5\_12 Chemistry of condensed matter
- PE5\_13 Homogeneous catalysis
- PE5\_14 Macromolecular chemistry
- PE5\_15 Polymer chemistry
- PE5\_16 Supramolecular chemistry
- PE5\_17 Organic chemistry
- PE5\_18 Medicinal chemistry

## **PE6 Computer Science and Informatics**

Informatics and information systems, computer science, scientific computing, intelligent systems

- PE6\_1 Computer architecture, embedded systems, operating systems
- PE6\_2 Distributed systems, parallel computing, sensor networks, cyber-physical systems
- PE6\_3 Software engineering, programming languages and systems
- PE6\_4 Theoretical computer science, formal methods, automata
- PE6\_5 Security, privacy, cryptology, quantum cryptography
- PE6\_6 Algorithms and complexity, distributed, parallel and network algorithms, algorithmic game theory
- PE6\_7 Artificial intelligence, intelligent systems, natural language processing
- PE6\_8 Computer graphics, computer vision, multimedia, computer games
- PE6\_9 Human computer interaction and interface, visualisation
- PE6\_10 Web and information systems, data management systems, information retrieval and digital libraries, data fusion
- PE6\_11 Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video)
- PE6\_12 Scientific computing, simulation and modelling tools
- PE6\_13 Bioinformatics, bio-inspired computing, and natural computing
- PE6\_14 Quantum computing (formal methods, algorithms and other computer science aspects)

## **PE7 Systems and Communication Engineering**

Electrical, electronic, communication, optical and systems engineering

- PE7\_1 Control engineering
- PE7\_2 Electrical engineering: power components and/or systems
- PE7\_3 Simulation engineering and modelling
- PE7\_4 (Micro- and nano-) systems engineering
- PE7\_5 (Micro- and nano-) electronic, optoelectronic and photonic components
- PE7\_6 Communication systems, wireless technology, high-frequency technology
- PE7\_7 Signal processing
- PE7\_8 Networks, e.g. communication networks and nodes, Internet of Things, sensor networks, networks of robots
- PE7\_9 Man-machine interfaces
- PE7\_10 Robotics
- PE7\_11 Components and systems for applications (in e.g. medicine, biology, environment)
- PE7\_12 Electrical energy production, distribution, applications

## **PE8 Products and Processes Engineering**

Product and process design, chemical, civil, environmental, mechanical, vehicle engineering, energy processes and relevant computational methods

- PE8\_1 Aerospace engineering
- PE8\_2 Chemical engineering, technical chemistry
- PE8\_3 Civil engineering, architecture, offshore construction, lightweight construction, geotechnics

- PE8\_4 Computational engineering
- PE8\_5 Fluid mechanics
- PE8\_6 Energy processes engineering
- PE8\_7 Mechanical engineering
- PE8\_8 Propulsion engineering, e.g. hydraulic, turbo, piston, hybrid engines
- PE8\_9 Production technology, process engineering
- PE8\_10 Manufacturing engineering and industrial design
- PE8\_11 Environmental engineering, e.g. sustainable design, waste and water treatment, recycling, regeneration or recovery of compounds, carbon capture & storage
- PE8\_12 Naval/marine engineering
- PE8\_13 Industrial bioengineering
- PE8\_14 Automotive and rail engineering; multi-/inter-modal transport engineering

### **PE9 Universe Sciences**

Astro-physics/-chemistry/-biology; solar system; planetary systems; stellar, galactic and extragalactic astronomy; cosmology; space sciences; astronomical instrumentation and data

- PE9\_1 Solar physics – the Sun and the heliosphere
- PE9\_2 Solar system science
- PE9\_3 Exoplanetary science, formation and characterization of extrasolar planets
- PE9\_4 Astrobiology
- PE9\_5 Interstellar medium and star formation
- PE9\_6 Stars – stellar physics, stellar systems
- PE9\_7 The Milky Way
- PE9\_8 Galaxies – formation, evolution, clusters
- PE9\_9 Cosmology and large-scale structure, dark matter, dark energy
- PE9\_10 Relativistic astrophysics and compact objects
- PE9\_11 Gravitational wave astronomy
- PE9\_12 High-energy and particle astronomy
- PE9\_13 Astronomical instrumentation and data, e.g. telescopes, detectors, techniques, archives, analyses

### **PE10 Earth System Science**

Physical geography, geology, geophysics, atmospheric sciences, oceanography, climatology, cryology, ecology, global environmental change, biogeochemical cycles, natural resources management

- PE10\_1 Atmospheric chemistry, atmospheric composition, air pollution
- PE10\_2 Meteorology, atmospheric physics and dynamics
- PE10\_3 Climatology and climate change
- PE10\_4 Terrestrial ecology, land cover change
- PE10\_5 Geology, tectonics, volcanology
- PE10\_6 Palaeoclimatology, palaeoecology
- PE10\_7 Physics of earth's interior, seismology, geodynamics
- PE10\_8 Oceanography (physical, chemical, biological, geological)
- PE10\_9 Biogeochemistry, biogeochemical cycles, environmental chemistry
- PE10\_10 Mineralogy, petrology, igneous petrology, metamorphic petrology
- PE10\_11 Geochemistry, cosmochemistry, crystal chemistry, isotope geochemistry, thermodynamics
- PE10\_12 Sedimentology, soil science, palaeontology, earth evolution
- PE10\_13 Physical geography, geomorphology
- PE10\_14 Earth observations from space/remote sensing
- PE10\_15 Geomagnetism, palaeomagnetism
- PE10\_16 Ozone, upper atmosphere, ionosphere
- PE10\_17 Hydrology, hydrogeology, engineering and environmental geology, water and soil pollution
- PE10\_18 Cryosphere, dynamics of snow and ice cover, sea ice, permafrosts and ice sheets
- PE10\_19 Planetary geology and geophysics
- PE10\_20 Geohazards
- PE10\_21 Earth system modelling and interactions

## **PE11 Materials Engineering**

Advanced materials development: performance enhancement, modelling, large-scale preparation, modification, tailoring, optimisation, novel and combined use of materials, etc.

PE11\_1 Engineering of biomaterials, biomimetic, bioinspired and bio-enabled materials

PE11\_2 Engineering of metals and alloys

PE11\_3 Engineering of ceramics and glasses

PE11\_4 Engineering of polymers and plastics

PE11\_5 Engineering of composites and hybrid materials

PE11\_6 Engineering of carbon materials

PE11\_7 Engineering of metal oxides

PE11\_8 Engineering of alternative established or emergent materials

PE11\_9 Nanomaterials engineering, e.g. nanoparticles, nanoporous materials, 1D & 2D nanomaterials

PE11\_10 Soft materials engineering, e.g. gels, foams, colloids

PE11\_11 Porous materials engineering, e.g. covalent-organic, metal-organic, porous aromatic frameworks

PE11\_12 Semi-conducting and magnetic materials engineering

PE11\_13 Metamaterials engineering

PE11\_14 Computational methods for materials engineering

## Life Sciences

### **LS1 Molecules of Life: Biological Mechanisms, Structures and Functions**

*For all organisms:*

Molecular biology, biochemistry, structural biology, molecular biophysics, synthetic and chemical biology, drug design, innovative methods and modelling

- LS1\_1 Macromolecular complexes including interactions involving nucleic acids, proteins, lipids and carbohydrates
- LS1\_2 Biochemistry
- LS1\_3 DNA and RNA biology
- LS1\_4 Protein biology
- LS1\_5 Lipid biology
- LS1\_6 Glycobiology
- LS1\_7 Molecular biophysics, biomechanics, bioenergetics
- LS1\_8 Structural biology
- LS1\_9 Molecular mechanisms of signalling processes
- LS1\_10 Synthetic biology
- LS1\_11 Chemical biology
- LS1\_12 Protein design
- LS1\_13 Early translational research and drug design
- LS1\_14 Innovative methods and modelling in molecular, structural and synthetic biology

### **LS2 Integrative Biology: from Genes and Genomes to Systems**

*For all organisms:*

Genetics, epigenetics, genomics and other 'omics studies, bioinformatics, systems biology, genetic diseases, gene editing, innovative methods and modelling, 'omics for personalised medicine

- LS2\_1 Genetics
- LS2\_2 Gene editing
- LS2\_3 Epigenetics
- LS2\_4 Gene regulation
- LS2\_5 Genomics
- LS2\_6 Metagenomics
- LS2\_7 Transcriptomics
- LS2\_8 Proteomics
- LS2\_9 Metabolomics
- LS2\_10 Glycomics/Lipidomics
- LS2\_11 Bioinformatics and computational biology
- LS2\_12 Biostatistics
- LS2\_13 Systems biology
- LS2\_14 Genetic diseases
- LS2\_15 Integrative biology for personalised medicine
- LS2\_16 Innovative methods and modelling in integrative biology

### **LS3 Cell Biology, Development, Stem Cells and Regeneration**

*For all organisms:*

Structure and function of the cell, cell-cell communication, embryogenesis, tissue differentiation, organogenesis, growth, development, evolution of development, organoids, stem cells, regeneration, therapeutic approaches

- LS3\_1 Cell cycle, cell division and growth
- LS3\_2 Cell senescence, cell death, autophagy, cell ageing
- LS3\_3 Cell behaviour, including control of cell shape, cell migration
- LS3\_4 Cell junctions, cell adhesion, the extracellular matrix, cell communication

- LS3\_5 Cell signalling and signal transduction, exosome biology
- LS3\_6 Organelle biology and trafficking
- LS3\_7 Mechanobiology of cells, tissues and organs
- LS3\_8 Embryogenesis, pattern formation, morphogenesis
- LS3\_9 Cell differentiation, formation of tissues and organs
- LS3\_10 Developmental genetics
- LS3\_11 Evolution of developmental strategies
- LS3\_12 Organoids
- LS3\_13 Stem cells
- LS3\_14 Regeneration
- LS3\_15 Development of cell-based therapeutic approaches for tissue regeneration
- LS3\_16 Functional imaging of cells and tissues
- LS3\_17 Theoretical modelling in cellular, developmental and regenerative biology

#### **LS4 Physiology in Health, Disease and Ageing**

Organ and tissue physiology, comparative physiology, physiology of ageing, pathophysiology, inter-organ and tissue communication, endocrinology, nutrition, metabolism, interaction with the microbiome, non-communicable diseases including cancer (and except disorders of the nervous system and immunity-related diseases)

- LS4\_1 Organ and tissue physiology and pathophysiology
- LS4\_2 Comparative physiology
- LS4\_3 Physiology of ageing
- LS4\_4 Endocrinology
- LS4\_5 Non-hormonal mechanisms of inter-organ and tissue communication
- LS4\_6 Microbiome and host physiology
- LS4\_7 Nutrition and exercise physiology
- LS4\_8 Impact of stress (including environmental stress) on physiology
- LS4\_9 Metabolism and metabolic disorders, including diabetes and obesity
- LS4\_10 The cardiovascular system and cardiovascular diseases
- LS4\_11 Haematopoiesis and blood diseases
- LS4\_12 Cancer
- LS4\_13 Other non-communicable diseases (except disorders of the nervous system and immunity-related diseases)

#### **LS5 Neuroscience and Disorders of the Nervous System**

Nervous system development, homeostasis and ageing, nervous system function and dysfunction, systems neuroscience and modelling, biological basis of cognitive processes and of behaviour, neurological and mental disorders

– *In humans and all other organisms*

- LS5\_1 Neuronal cells
- LS5\_2 Glial cells and neuronal-glia communication
- LS5\_3 Neural development and related disorders
- LS5\_4 Neural stem cells
- LS5\_5 Neural networks and plasticity
- LS5\_6 Neurovascular biology and blood-brain barrier
- LS5\_7 Sensory systems, sensation and perception, including pain
- LS5\_8 Neural basis of behaviour (e.g. sleep, consciousness, addiction)
- LS5\_9 Neural basis of cognition (e.g. learning, memory, attention, emotions, speech)
- LS5\_10 Ageing of the nervous system
- LS5\_11 Neurological and neurodegenerative disorders
- LS5\_12 Mental disorders
- LS5\_13 Nervous system injuries and trauma, stroke
- LS5\_14 Repair and regeneration of the nervous system

- LS5\_15 Neuroimmunology, neuroinflammation
- LS5\_16 Systems and computational neuroscience (e.g. modelling, simulation, brain oscillations, connectomics)
- LS5\_17 Imaging in neuroscience
- LS5\_18 Innovative methods and tools for neuroscience

### **LS6 Immunity, Infection and Immunotherapy**

The immune system, related disorders and their mechanisms, biology of infectious agents and infection, biological basis of prevention and treatment of infectious diseases, innovative immunological tools and approaches, including therapies

- LS6\_1 Innate immunity
- LS6\_2 Adaptive immunity
- LS6\_3 Regulation of the immune response
- LS6\_4 Immune-related diseases
- LS6\_5 Biology of pathogens (e.g. bacteria, viruses, parasites, fungi)
- LS6\_6 Infectious diseases
- LS6\_7 Mechanisms of infection
- LS6\_8 Biological basis of prevention and treatment of infection
- LS6\_9 Antimicrobials, antimicrobial resistance
- LS6\_10 Vaccine development
- LS6\_11 Innovative immunological tools and approaches, including therapies

### **LS7 Prevention, Diagnosis and Treatment of Human Diseases**

Medical technologies and tools for prevention, diagnosis and treatment of human diseases, therapeutic approaches and interventions, pharmacology, preventative medicine, epidemiology and public health, digital medicine

- LS7\_1 Medical imaging for prevention, diagnosis and monitoring of diseases
- LS7\_2 Medical technologies and tools (including genetic tools and biomarkers) for prevention, diagnosis, monitoring and treatment of diseases
- LS7\_3 Nanomedicine
- LS7\_4 Regenerative medicine
- LS7\_5 Applied gene, cell and immune therapies
- LS7\_6 Other medical therapeutic interventions, including transplantation
- LS7\_7 Pharmacology and toxicology
- LS7\_8 Effectiveness of interventions, including resistance to therapies
- LS7\_9 Public health and epidemiology
- LS7\_10 Preventative and prognostic medicine
- LS7\_11 Environmental health, occupational medicine
- LS7\_12 Health care, including care for the ageing population
- LS7\_13 Palliative medicine
- LS7\_14 Digital medicine, e-medicine, medical applications of artificial intelligence
- LS7\_15 Medical ethics

### **LS8 Environmental Biology, Ecology and Evolution**

*For all organisms:*

Ecology, biodiversity, environmental change, evolutionary biology, behavioural ecology, microbial ecology, marine biology, ecophysiology, theoretical developments and modelling

- LS8\_1 Ecosystem and community ecology, macroecology
- LS8\_2 Biodiversity
- LS8\_3 Conservation biology
- LS8\_4 Population biology, population dynamics, population genetics
- LS8\_5 Biological aspects of environmental change, including climate change
- LS8\_6 Evolutionary ecology
- LS8\_7 Evolutionary genetics



- LS8\_8 Phylogenetics, systematics, comparative biology
- LS8\_9 Macroevolution and paleobiology
- LS8\_10 Ecology and evolution of species interactions
- LS8\_11 Behavioural ecology and evolution
- LS8\_12 Microbial ecology and evolution
- LS8\_13 Marine biology and ecology
- LS8\_14 Ecophysiology, from organisms to ecosystems
- LS8\_15 Theoretical developments and modelling in environmental biology, ecology, and evolution

### **LS9 Biotechnology and Biosystems Engineering**

Biotechnology using all organisms, biotechnology for environment and food applications, applied plant and animal sciences, bioengineering and synthetic biology, biomass and biofuels, biohazards

- LS9\_1 Bioengineering for synthetic and chemical biology
- LS9\_2 Applied genetics, gene editing and transgenic organisms
- LS9\_3 Bioengineering of cells, tissues, organs and organisms
- LS9\_4 Microbial biotechnology and bioengineering
- LS9\_5 Food biotechnology and bioengineering
- LS9\_6 Marine biotechnology and bioengineering
- LS9\_7 Environmental biotechnology and bioengineering
- LS9\_8 Applied plant sciences, plant breeding, agroecology and soil biology
- LS9\_9 Plant pathology and pest resistance
- LS9\_10 Veterinary and applied animal sciences
- LS9\_11 Biomass production and utilisation, biofuels
- LS9\_12 Ecotoxicology, biohazards and biosafety

## Social Sciences and Humanities

### SH1 Individuals, Markets and Organisations

Economics, finance, management

- SH1\_1 Macroeconomics; monetary economics; economic growth, labour economics
- SH1\_2 International trade; international business; spatial economics
- SH1\_3 Development economics political economics
- SH1\_4 Finance; financial markets
- SH1\_5 Corporate finance; international finance
- SH1\_6 Banking, insurance
- SH1\_7 Accounting, asset prices, auditing
- SH1\_8 Econometrics, game theory, decision theory
- SH1\_9 Behavioural economics; experimental economics; neuro-economics
- SH1\_10 Microeconomics, industrial organisation, applied microeconomics
- SH1\_11 Innovation, research & development, entrepreneurship
- SH1\_12 Management; operations management, international management
- SH1\_13 Human resource management; organisational behaviour
- SH1\_14 Strategy, operation research
- SH1\_15 Marketing, consumer behaviour
- SH1\_16 Quantitative economic history, economic systems, institutional economics

### SH2 Institutions, Governance and Legal Systems

Political science, international relations, law

- SH2\_1 Political systems, governance
- SH2\_2 Democratisation and social movements
- SH2\_3 Conflict resolution, war, peace building
- SH2\_4 Legal studies, comparative law, law and economics
- SH2\_5 Constitutions, human rights, international law
- SH2\_6 International relations, global and transnational governance
- SH2\_7 Humanitarian assistance and development
- SH2\_8 Political and legal philosophy
- SH2\_9 Digital approaches to political science and law

### SH3 The Social World and Its Interactions

Sociology, social psychology, education sciences, communication studies

- SH3\_1 Social structure, social mobility, social innovation
- SH3\_2 Inequalities, discrimination, prejudice
- SH3\_3 Aggression and violence, antisocial behaviour, crime
- SH3\_4 Social integration, exclusion, prosocial behaviour
- SH3\_5 Social attitudes and beliefs
- SH3\_6 Social influence; power and group behaviour
- SH3\_7 Social policies, welfare, work and employment
- SH3\_8 Poverty and poverty alleviation
- SH3\_9 Social aspects of teaching and learning, curriculum studies, education and educational policies
- SH3\_10 Communication and information, networks, media
- SH3\_11 Digital social research
- SH3\_12 Social studies of science and technology

### SH4 The Human Mind and Its Complexity

Cognitive science, psychology, linguistics

- SH4\_1 Cognitive basis of human development, developmental disorders; comparative cognition
- SH4\_2 Personality and social cognition; emotion
- SH4\_3 Clinical and health psychology

- SH4\_4 Neurocognitive psychology
- SH4\_5 Attention, perception, action, consciousness
- SH4\_6 Learning, memory; cognition in ageing
- SH4\_7 Reasoning, decision-making; intelligence
- SH4\_8 Language learning and processing (first and second languages)
- SH4\_9 Theoretical linguistics; computational linguistics
- SH4\_10 Language typology; historical linguistics
- SH4\_11 Pragmatics, sociolinguistics, linguistic anthropology, discourse analysis

## **SH5 Texts and Concepts**

Literary studies, literature, philosophy

- SH5\_1 Classics, ancient literature
- SH5\_2 Theory and history of literature, comparative literature
- SH5\_3 Book studies
- SH5\_4 Philology; text and image studies
- SH5\_5 Palaeography and codicology
- SH5\_6 Philosophy of mind, philosophy of language
- SH5\_7 Philosophy of science, epistemology, logic
- SH5\_8 Metaphysics, philosophical anthropology; aesthetics
- SH5\_9 Ethics and its applications; social philosophy
- SH5\_10 History of philosophy
- SH5\_11 Digital humanities; digital approaches to literary studies and philosophy

## **SH6 The Study of the Human Past**

Archaeology and history

- SH6\_1 Archaeological methods and theory, history of archaeology
- SH6\_2 Prehistoric archaeology, archaeology of non-literate societies
- SH6\_3 Archaeology of early literate societies and early civilizations
- SH6\_4 Medieval and post-medieval archaeologies
- SH6\_5 Archaeological science, bioarchaeology, environmental archaeology, geoarchaeology
- SH6\_6 Digital, computational, virtual and geospatial archaeologies
- SH6\_7 Historiography, theory and methods of history, including the analysis of digital data
- SH6\_8 Ancient history, medieval history
- SH6\_9 Early modern, modern, and contemporary history
- SH6\_10 Colonial and post-colonial history
- SH6\_11 Global, transnational, and comparative history
- SH6\_12 Social and economic history
- SH6\_13 Cultural history, intellectual history
- SH6\_14 History of science and technologies, environmental history

## **SH7 Human Mobility, Environment, and Space**

Human geography, demography, health, sustainability science, territorial planning, spatial analysis

- SH7\_1 Human, economic and social geography
- SH7\_2 Migration
- SH7\_3 Population dynamics: households, family and fertility
- SH7\_4 Social aspects of health, ageing and society
- SH7\_5 Sustainability sciences, environment and resources, ecosystem services
- SH7\_6 Environmental and climate change, societal impact and policy
- SH7\_7 Cities; urban, regional and rural studies
- SH7\_8 Land use and planning
- SH7\_9 Energy, transportation and mobility
- SH7\_10 GIS, spatial analysis; digital geography

## **SH8 Studies of Cultures and Arts**

Social anthropology, studies of cultures, studies of arts

- SH8\_1 Kinship; diversity and identities, gender, interethnic relations
- SH8\_2 Religious studies, ritual; symbolic representation
- SH8\_3 Cultural studies and theory, cultural identities and memories, cultural heritage
- SH8\_4 Museums, exhibitions, conservation and restoration
- SH8\_5 History of art and of architecture
- SH8\_6 Architecture, design, craft, creative industries
- SH8\_7 Music and musicology; history of music
- SH8\_8 Visual and performing arts, screen, arts-based research
- SH8\_9 Digital approaches to anthropology, cultural studies and art