



**LIST OF DISCIPLINES  
FOR POLISH-GERMAN RESEARCH PROJECTS  
WITHIN THE BEETHOVEN CLASSIC 3 CALL**

**Arts, Humanities and Social Sciences**

**HS1 Fundamental questions of human existence and the nature of reality: philosophy, cognition, religious studies, theology**

**HS1\_1** History of philosophy (ancient, medieval, modern and contemporary) and history of ideas

**HS1\_2** Ontology and metaphysics, particular ontologies

**HS1\_3** Epistemology (incl. sources of knowledge, criteria of truth, philosophy of language)

**HS1\_4** Logic, science methodology, philosophy of science

**HS1\_5** Philosophy of human, theories of personality, philosophy of culture, social philosophy

**HS1\_6** Nature of human mind (incl. mind's evolution, bio-psychological conditions of cognition, artificial intelligence)

**HS1\_7** Ethics: normative and descriptive, theory of morality, bioethics, professional ethics

**HS1\_8** Aesthetics (incl. theory of beauty, language of art)

**HS1\_9** Theory of religion, history of religion, religious studies

**HS1\_10** Religion and its background: anthropological, cultural, social and psychological

**HS1\_11** Language of religion, sacrum, myth, religious symbolism

**HS1\_12** World religions

**HS1\_13** Fundamental theology

**HS1\_14** Dogmatic theology, biblical theology, patristics

**HS1\_15** Moral theology, pastoral theology, liturgics

**HS1\_16** Other related subjects

**HS2 Culture and cultural production: literary theory and comparative literature, history of literature, linguistics, library science, cultural studies, arts, architecture**



- HS2\_1** History of literature (including: ancient, modern, contemporary; national and world literature), literary criticism and interpretation
- HS2\_2** Theory of literature, history of literary studies, methodology and trends in literary and cultural studies, anthropology of literature, comparative literature, literary and cultural translatology
- HS2\_3** Editorial and philological studies, lexical and encyclopedic studies, documentation and bibliographical studies
- HS2\_4** Bibliology and theory of information
- HS2\_5** History of language and dialectology, modern language research and discourse analysis, textology, linguistic translatology
- HS2\_6** General linguistics, theory and methodology of linguistic research
- HS2\_7** Communication studies, theory of applied linguistics
- HS2\_8** History and theory of art, visual arts, visual culture
- HS2\_9** Conservation and restoration
- HS2\_10** Museums and exhibitions
- HS2\_11** Music and musicology, history of music
- HS2\_12** Performing arts
- HS2\_13** Film and audiovisual media
- HS2\_14** Cultural studies (including: contemporary cultural studies and cultural-anthropological studies)
- HS2\_15** Other related subjects
- HS3** **The study of the human past: history, archaeology, ethnology, cultural anthropology**
- HS3\_1** Early history (ancient, medieval, early modern history), modern and contemporary history (19th - 20th c.)
- HS3\_2** Social history
- HS3\_3** Political history (incl. political systems)
- HS3\_4** Economic history
- HS3\_5** Cultural history (incl. historical memory, history of material culture, historical cultural studies, cultural diversity)



**HS3\_6** Historiography, theory and methods of history

**HS3\_7** Archival science

**HS3\_8** Archaeology (incl. archaeology of Greece and Rome, archaeology of Egypt and Nubia, archaeology of Near East, archeology of the New World, pre- and protohistorical archaeology, archaeology of early medieval period, medieval archeology, archeology of modern period)

**HS3\_9** Numismatics and epigraphy

**HS3\_10** Papyrology

**HS3\_11** Ethnography and cultural anthropology (incl. descriptions of traditional cultures, anthropology of magic, worship and religion, cultural change and global processes, anthropology of socio-cultural, ethnic and identity phenomena)

**HS3\_12** Cultural heritage, cultural memory (incl. inventory of monuments and monuments of culture, local history)

**HS3\_13** Other related subjects

**HS4 Individuals, institutions, markets: economics, finance, management, demography, social and economic geography, urban studies**

**HS4\_1** Macroeconomics (incl. economic balance, economic growth, business cycles in global economy, labour economics)

**HS4\_2** Microeconomics, institutional economics

**HS4\_3** Econometrics, statistical methods

**HS4\_4** Population dynamics, demographic processes

**HS4\_5** Resources and sustainable development

**HS4\_6** Financial markets, international finance, public finance

**HS4\_7** Banking, corporate finance, accounting

**HS4\_8** Behavioral economics, consumption and consumer behavior, marketing

**HS4\_9** Organization studies, strategic management, concepts and methods of management, logistics

**HS4\_10** Human resource management, employment and salaries

**HS4\_11** Public economics, social infrastructure, public administration



**HS4\_12** Living conditions and standards, income distribution, poverty

**HS4\_13** International economics

**HS4\_14** Human and social geography

**HS4\_15** Land management, urban studies

**HS4\_16** Other related subjects

**HS5 Norms and governance: law, political studies, regional and social policies**

**HS5\_1** Theory and philosophy of law, history of law and legal thought

**HS5\_2** Constitutional law, human rights, international law and international organizations

**HS5\_3** Public and social law, public governance

**HS5\_4** Penal law

**HS5\_5** Civil law

**HS5\_6** Political theory and political thought

**HS5\_7** Political systems and movements; international relations

**HS5\_8** Regional policy

**HS5\_9** Social policy (incl. social security, NGOs, social aid, social gerontology, governance and institutions of social dialogue)

**HS5\_10** Security and defence

**HS5\_11** Other related subjects

**HS6 Human nature and human society: psychology, pedagogy/education studies, sociology**

**HS6\_1** General psychology (cognitive processes, emotions, motivations, personality, individual differences), experimental psychology, psycholinguistics

**HS6\_2** Social, political, environmental and intercultural psychology

**HS6\_3** Clinical, health, correctional, rehabilitation psychology; clinical neuropsychology

**HS6\_4** Psychology of development, family, parenting, education

**HS6\_5** Evolutionary and comparative psychology, genetics of behaviour, psychophysiology, neuropsychology



- HS6\_6** Economic psychology, psychology of labour, organization, marketing and advertising
- HS6\_7** History of psychology, methodology, psychometrics, psychological diagnostics
- HS6\_8** General, comparative and cultural pedagogy
- HS6\_9** Social pedagogy and andragogy, social prevention and resocialization
- HS6\_10** Special needs education
- HS6\_11** Teaching and higher education
- HS6\_12** Theory and philosophy of parenting, history of teaching
- HS6\_13** Theoretical sociology, methodology and empirical studies
- HS6\_14** Social structure and social dynamics, environmental change and society
- HS6\_15** Sociology of ideas, power, norms, organizations
- HS6\_16** Sociology of culture and social communication (including media studies, journalism, Internet communication)
- HS6\_17** Economic sociology and sociology of education
- HS6\_18** Sociology of development: local, regional and global level
- HS6\_19** Social problems and pragmatics of sociology
- HS6\_20** Public space
- HS6\_21** Other related subjects



**ST – Physical Sciences and Engineering**

**ST1 Mathematics: all areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics**

ST1\_1 Logic and foundations of mathematics

ST1\_2 Algebra

ST1\_3 Number theory

ST1\_4 Algebraic and complex geometry

ST1\_5 Geometry

ST1\_6 Topology

ST1\_7 Lie groups, Lie algebras

ST1\_8 Analysis

ST1\_9 Operator algebras and functional analysis

ST1\_10 Ordinary differential equations and dynamical systems

ST1\_11 Partial differential equations

ST1\_12 Mathematical physics

ST1\_13 Probability and mathematical statistics

ST1\_14 Combinatorics

ST1\_16 Numerical analysis and scientific computing

ST1\_17 Control theory and optimization

**ST2 Fundamental constituents of matter: particle, nuclear, plasma, atomic, molecular, gas and optical physics**

ST2\_1 Fundamental interactions and fields

ST2\_2 Particle physics

ST2\_3 Nuclear physics

ST2\_4 Nuclear astrophysics

ST2\_5 Gas and plasma physics

ST2\_6 Electricity and magnetism



**ST2\_7** Atomic and molecular physics

**ST2\_8** Optics and quantum optics

**ST2\_9** Lasers and laser physics

**ST2\_11** Relativity and gravitation

**ST2\_12** Classical physics

**ST2\_14** Non-linear phenomena

**ST2\_15** General physics (quantum mechanics, quantum information, other interdisciplinary problems in physics, ...)

**ST2\_16** Metrology and measurement methods

**ST2\_17** Statistical physics (gases)

**ST2\_18** Complex systems

**ST3 Condensed matter physics: structure, electronic properties, fluids, nanosciences**

**ST3\_1** Structure of solids and liquids

**ST3\_2** Mechanical and acoustical properties of condensed matter

**ST3\_3** Thermal properties of condensed matter

**ST3\_4** Transport in condensed matter

**ST3\_5** Electronic properties of materials and transport

**ST3\_6** Lattice dynamics

**ST3\_7** Semiconductors

**ST3\_8** Superconductivity

**ST3\_9** Superfluidity

**ST3\_10** Spintronics

**ST3\_11** Magnetism

**ST3\_12** Nanophysics: nanoelectronics, nanophotonics, nanomagnetism

**ST3\_13** Mesoscopic physics

**ST3\_14** Molecular electronics

**ST3\_15** Soft matter physics (liquid crystals, polymers,...)



**ST3\_16** Fluid dynamics (fundamental problems)

**ST3\_17** Statistical physics (condensed matter)

**ST3\_18** Phase transitions, phase equilibrium

**ST4 Physical and analytical chemical sciences: analytical chemistry, theoretical methods in chemistry, physical chemistry/chemical physics**

**ST4\_1** Physical chemistry

**ST4\_2** Nanochemistry

**ST4\_3** Spectroscopic and spectrometric techniques

**ST4\_4** Molecular architecture and structure

**ST4\_5** Surface chemistry

**ST4\_6** Analytical chemistry

**ST4\_7** Chemical physics

**ST4\_8** Instrumental methods in chemistry

**ST4\_9** Electrochemistry, electrodialysis, chemistry in microfluids

**ST4\_10** Combinatorial chemistry

**ST4\_11** Modern methods in chemical reactions and processes

**ST4\_12** Catalysis

**ST4\_13** Physical chemistry of biological systems

**ST4\_14** Chemical reactions: mechanisms, thermodynamics, kinetics and catalysis

**ST4\_15** Theoretical and computational chemistry

**ST4\_16** Nuclear and radiation chemistry

**ST4\_17** Photochemistry

**ST5 Materials and synthesis: materials synthesis, structure-properties relations, advanced and functional materials with designed properties, (macro)molecular architecture, organic chemistry, inorganic chemistry**

**ST5\_1** Structural properties of materials

**ST5\_2** Solid state materials





**ST5\_3** Surface modification

**ST5\_4** Thin films

**ST5\_5** Corrosion

**ST5\_6** Porous materials

**ST5\_7** Ionic liquids

**ST5\_8** New materials: oxides, alloys, composite materials, organic-inorganic hybrid materials, superconductors

**ST5\_9** Materials for sensors

**ST5\_10** Nanomaterials, nanoparticles, nanotubes

**ST5\_11** Biomaterials synthesis

**ST5\_12** Smart materials – self-assembly materials, external stimuli-responsive materials

**ST5\_13** Environmental chemistry

**ST5\_14** Coordination chemistry

**ST5\_15** Colloid chemistry

**ST5\_16** Biological chemistry

**ST5\_17** Condensed matter chemistry

**ST5\_18** Homogeneous and heterogeneous catalysis

**ST5\_19** Methods of research of material properties

**ST5\_20** Molecular and macromolecular chemistry

**ST5\_21** Polymer chemistry

**ST5\_22** Supramolecular chemistry

**ST5\_23** Organic chemistry

**ST5\_24** Inorganic chemistry

**ST9 Astronomy and space research: astrophysics/astrochemistry/astrobiology, solar system, planetary systems, stellar, galactic and extragalactic astronomy, cosmology, space science, instrumentation**

**ST9\_1** Solar and interplanetary physics



- ST9\_2** Planets and small solar-system bodies
- ST9\_3** Interstellar medium
- ST9\_4** Formation of stars and planets
- ST9\_5** Extrasolar planetary systems
- ST9\_6** Astrobiology
- ST9\_7** Stars and stellar systems
- ST9\_8** The Galaxy
- ST9\_9** Formation and evolution of galaxies
- ST9\_10** Clusters of galaxies and large scale structures of the Universe
- ST9\_11** High energy and particles astronomy - X-rays, gamma rays, cosmic rays, neutrinos
- ST9\_12** Relativistic astrophysics
- ST9\_13** Dark matter, dark energy
- ST9\_14** Gravitational astronomy
- ST9\_15** Cosmology
- ST9\_16** Earth and space research using satellite techniques
- ST9\_17** Large data bases: archiving, handling and analysis
- ST9\_18** Observational (instrumentation, detectors) and satellite techniques

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*The English version of this document does not constitute a sworn translation and has been prepared as an auxiliary document for your convenience. In case of any doubts as to the interpretation of its provisions, the Polish version shall prevail.*