



## PLANUL NAȚIONAL DE CERCETARE, DEZVOLTARE ȘI INOVARE 2015-2020, PNIII



Proiecte de cercetare "ERC - like"

Pachet de informații 2016

## **CUPRINS**

Proiecte de cercetare "ERC – like"	3
ANEXA 1 - Cerere de finanțare - Identificator: PN-III-ID-ERC-2016-1, proiecte de tip 1–Granturi Suport (Support Grant)	
ANEXA 2 - Cerere de finanțare - Identificator: PN-III-ID-ERC-2016-2, proiecte de tip 2 – Granturi de Excelență ( <i>Excellence Grant</i> )	12
ANEXA 3 – Fişă de evaluare – pentru tipul 1 de proiecte	14
ANEXA 4 – Domenii științifice ERC	14

Proiecte de cercetare "ERC – like"

**Identificator: PN-III-ID-ERC-2016-1** 

1. Scop:

Identificarea și susținerea cercetătorilor români cu rezultate excelente obținute în competițiile

organizate de European Research Council (ERC) în anii 2014, 2015 și 2016, în vederea afirmării

prestigiului cercetării științifice din România la nivel internațional.

2. Objective

- obținerea unor rezultate științifice de excelență reflectate în creșterea numărului de publicații

cu înalt impact internațional, precum și în creșterea numărului de invenții brevetate, aplicate

în economie;

- creșterea capacității de a candida cu succes la următoarele competiții organizate de ERC;

- implementarea principiului "finanțarea urmează performanța" în cercetare.

3. Criterii de eligibilitate:

- directorul de proiect, cercetător român, împreună cu o instituție gazdă din România, a

participat, în calitate de PI (Principal Investigator), la una din competițiile organizate de ERC

în 2014, 2015 și 2016 (Starting Grant, Consolidator Grant sau Advanced Grant);

· directorul de proiect poate beneficia o singură dată de finanțare pentru un proiect de tip "ERC

- like";

- este interzisă depunerea de proiecte care au în vedere activități deja finanțate sau în curs de

finanțare din alte surse, naționale sau internaționale;

· institutia gazdă se încadrează în definiția organizației de cercetare conform Cadrului

Comunitar pentru Ajutor de Stat de Cercetare Dezvoltare și Inovare;

- institutia gazdă nu este declarată, conform legii, în stare de incapacitate de plată; nu are

conturile blocate conform unei hotărâri judecătoresti; nu a furnizat declarații inexacte cu

privire la informațiile solicitate de către UEFISCDI în vederea selectării contractanților; nu a

încălcat prevederile unui alt contract de finanțare încheiat anterior.

4. Tip de finanțare acordată prin ERC-Like:

- Proiecte tip 1 – "Grant Suport" ("Support Grant"):

o proiecte care au obținut calificativul B în etapa a II-a de evaluare ERC în competițiile

Starting Grant / Consolidator Grant / Advanced Grant (dovedesc doar întrunirea anumitor

3

criterii de excelență ERC și nu au fost recomandate la finanțare în urma procesului de evaluare desfasurat de ERC);

- o finanțarea maximă acordată pentru un proiect de acest tip este de **750.000 lei / 2 ani**;
- o directorul de proiect propune un proiect de cercetare, parte a cererii de finanțare depusă la ERC, corespunzător bugetului alocat din finanțare națională.

#### - Proiecte tip 2 – "Grant de excelență" ("Excellence Grant"):

- o proiecte care au obținut *calificativul A în etapa a II-a de evaluare ERC* în competițiile oricare din competițiile *Starting Grant / Consolidator Grant / Advanced Grant* (dovedesc întrunirea tuturor criteriilor de excelență, dar fondurile alocate nu au permis finanțarea acestora);
- o finanțarea maximă acordată pentru un proiect de acest tip este de:
  - 6.750.000 lei / 5 ani pentru un proiect din competiția Starting Grant;
  - 9.000.000 lei / 5 ani pentru un proiect din competiția Consolidator Grant ;
  - 11.250.000 lei / 5 ani pentru un proiect din competiția Advanced Grant;
- o bugetul și perioada de implementare trebuie să corespundă cererii de finanțare evaluată de ERC și să țină cont de eventualele recomandări privind redimensionarea bugetului, specificate în fișa de evaluare ERC;
- o directorul de proiect va implementa proiectul conform cererii de finanțare depusă la ERC.

#### Cheltuieli eligibile:

- *cheltuieli cu personalul* (inclusiv contribuțiile legale aferente salariilor și veniturilor asimilate acestora); pentru fiecare persoană, cheltuielile de personal, inclusiv contribuțiile aferente decontate în cadrul unui proiect, vor respecta prevederile HG 583/2015;
- *cheltuieli de logistică* necesare pentru derularea proiectului, inclusiv echipamente, consumabile de laborator, cheltuieli materiale, cheltuieli pentru diseminare, informare-documentare, acces la infrastructura de cercetare a terților etc.;
- cheltuieli de deplasare aferente deplasărilor în țară sau în străinătate ale PI și membrilor echipei, pentru stagii de documentare sau cercetare, participări la manifestări științifice de prestigiu din domeniul proiectului; se pot finanța și cheltuieli de deplasare ale unor colaboratori din țară sau din străinătate sau ale unor participanți la manifestările științifice organizate în cadrul proiectului;
- *cheltuieli indirecte* (regie) cheltuielile indirecte se calculează ca procentaj din cheltuielile directe: cheltuieli cu personalul, cheltuieli de logistică și cheltuieli de deplasare. De regulă, cheltuielile indirecte nu vor depăși 15% din valoarea cheltuielilor directe.

**Bugetul competiției 2016-2018**: max. 20.000.000 lei, din care în 2016 - 2.000.000 lei.

#### 5. Durata:

- maximum 24 luni pentru Tipul 1 de proiecte;
- maximum 60 luni pentru Tipul 2 de proiecte.

#### 6. Procedura de depunere, evaluare și selecție a cererilor de finanțare

Cererile de finanțare se depun într-o singură etapă în platforma web <u>www.uefiscdi-direct.ro</u> și se redactează în limba engleză conform *Anexei 1* și *Anexei 2 – Cererea de finanțare, corespunzătoare fiecărui tip de proiect.* 

Cererea de finanțare trebuie să fie însoțită și de cererea de finanțare (copie) depusă la ERC, precum și de fișa de evaluare (copie) transmisă de ERC directorului de proiect.

De asemenea, se va atașa declarația prin care instituția gazdă acceptă implementarea proiectului, asigură sprijinul administrativ pentru proiect, asigură resursele indicate în cererea de finanțare, sprijină desfășurarea proiectului în bune condiții și angajează membrii echipei proiectului, în condițiile legii, conform propunerii de proiect, în cazul în care proiectul este finanțat. În cazul în care proiectul prevede activități care vor respecta normele de etică, se vor depune și documentele în acest sens.

#### 6.1 Verificarea eligibilității

Cererile de finanțare sunt verificate de către personalul administrativ al UEFISCDI, pentru a se asigura că sunt îndeplinite criteriile de eligibilitate. Lista cu propunerile de proiecte eligibile va fi afișată pe site-ul web al UEFISCDI - <a href="www.uefiscdi.gov.ro">www.uefiscdi.gov.ro</a>.

#### **6.2** Evaluarea

- Pentru proiectele de tip 2, UEFISCDI nu organizează propria evaluare, iar decizia de finanțare se bazează exclusiv pe rezultatele procesului internațional de evaluare organizat de ERC.
- Pentru proiectele de tip 1, la nivelul UEFISCDI se constituie un panel de experți independenți care analizează oportunitatea acordării finanțării. Rezultatul este de tip admis/respins.

**6.3 Publicarea rezultatelor:** Lista cererilor de finanțare acceptate la finanțare vor fi publicate pe pagina web UEFISCDI (www.uefiscdi.gov.ro).

#### 7. Contractarea

Contractul de finanțare este multianual și se semnează între UEFISCDI și universitatea gazdă.

#### 8. Principalele obligații ale părților:

#### Directorul de proiect

- 1. Răspunde de implementarea proiectului;
- 2. Întocmește și transmite autorității contractante rapoarte de progres științific pe parcursul proiectului și un raport final, la momentul și în formatul stabilite de CNCS/UEFISCDI în contractul de finanțare. Termenele rapoartelor intermediare se propun de către directorul de proiect, în concordanță cu planul de lucru prevăzut în cererea de finanțare;
- 3. Mediatizează activitățile și anunță pozițiile vacante în proiectul de cercetare (inclusiv pe siteurile <u>www.ancs.ro/jobs</u> și <u>www.euraxess.ro</u>);
- 4. Asigură informații actualizate privind derularea proiectului pe o pagină web a proiectului, în limba englezăș
- 5. Directorul de proiect certifică, prin propria declarație, nefinanțarea activităților propuse în proiect din alte surse (naționale sau internaționale).

#### Instituția gazdă

- 1. Asigură accesul directorului de proiect la infrastructura de cercetare existentă și îl sprijină administrativ pe acesta în implementarea proiectului;
- 2. Întocmește și transmite autorității contractante raportările financiare ale proiectului, la finalul fiecărei etape de raportare financiară. Formatul raportărilor financiare este stabilit prin contractul de finanțare;
- 3. Instituția din care face parte directorul de proiect, prin semnătura reprezentantului legal și prin semnătura directorului de proiect certifică, pe propria răspundere, legalitatea și corectitudinea informațiilor cuprinse în cererea de finanțare, acceptă implementarea proiectului în cadrul instituției, asigură sprijinul administrativ pentru proiect, asigură resursele indicate în cererea de finanțare, se angajează să sprijine desfășurarea proiectului în bune condiții și să angajeze membrii echipei proiectului, în condițiile legii, conform propunerii de proiect, în cazul în care proiectul este finanțat.

#### **UEFISCDI**

Asigură finanțarea și monitorizarea proiectului conform cadrului legal în vigoare.

#### 10. Calendarul competiției:

ACTIVITATE	TERMEN	
Lansarea competiției	aprilie 2016	
Depunerea cererilor de finanțare pentru competitiile 2014 si 2015	01.05.2016	
Publicarea listei finale cu proiecte propuse pentru finanțare	15.05.2016	
Contractarea	03.06.2016	
pentru competițiile 2016 depunerea se deschide pe masură ce ERC anunță rezultatele.		

#### Note:

Cererile de finanțare se depun prin intermediul platformei web - <u>www.uefiscdi-direct.ro</u>, nefiind necesară depunerea și în format tipărit.

Cererile de finanțare se încarcă pe platformă, în secțiunea dedicată, în **format .pdf textual** (exclus scanat).

Cererile de finanțare vor fi însoțite de o **declarație pe propria răspundere a directorului de proiect** privind nefinanțarea activităților propuse în proiect din alte surse (naționale sau internaționale).

Cererea de finanțare trebuie să fie însoțită de o **declarație pe propria răspundere a instituției gazdă** în limba română (semnată de reprezentantul legal și ștampilată) prin care se certifică acceptarea implementării proiectului în instituție, asigurarea sprijinului administrativ, punerea la dispoziția proiectului a infrastructurii necesare, angajamentul de a sprijini desfășurarea proiectului în bune condiții și angajarea membrilor echipei de proiect, în condițiile legii, conform propunerii de proiect, în cazul în care proiectul este finanțat. Această declarație se semnează, se scanează în format .pdf și se încarcă pe platformă în secțiunea dedicată.

# ANEXA 1 - Cerere de finanțare - Identificator: PN-III-ID-ERC-2016-1, proiecte de tip 1—Granturi Suport (Support Grant)

## A. Informații generale Titlul proiectului (max. 200 caractere): Acronim (max. 20 caractere): Competiția ERC: 2014/2015/2016 Durata (în luni): Rezumat (min. 100 / max. 2.000 de caractere): **Directorul de proiect:** Nume: Nume anterioare (dacă este cazul): Prenume: Data nașterii: Doctor din anul: Telefon: Adresa de e-mail: Instituția gazdă a proiectului: Numele instituției: Adresa instituției: Domeniul în care se încadrează proiectul (conform ANEXA 4 – 4.1/4.2/4.3) Domeniul: Subdomeniul: Aria de cercetare principală: Aria de cercetare secundară: Aria de cercetare secundară (opțional): **Cuvinte cheie:** 1: 2: 3: 4 (optional): 5 (opțional):

B. Cererea de finanțare depusă la ERC (se atașează copie după propunerea de proiect) și fișa de evaluare ERC.



#### C. Descrierea proiectului de cercetare (max. 10 pagini în limba engleză)

În acest capitol se va preciza, în detaliu, componenta din propunerea de proiect depusă la ERC ce urmează a fi implementată prin prezenta finanțare și planul de lucru. *Descrierea proiectului de cercetare se va structura conform cerințelor programului ERC*.

#### Notă:

Documentul folosește caractere Times New Roman de 12 puncte, spațiere între linii de 1.5 și margini de 2 cm. Numărul de pagini impus nu conține și referințele bibliografice, acestea vor fi trecute pe pagini suplimentare. La fiecare secțiune se va menține textul care marchează informațiile și secțiunile obligatorii ale cererii.



Deviz antecalcul (lei, pe ani calendaristici):

Se va specifica și justifica solicitarea de buget pe tipuri de cheltuieli.

Capitol de buget	an 2016	an 2017	an 2018	Total
(cheltuieli)	(lei)	(lei)	(lei)	(lei)
Personal				
Logistică				
Deplasare				
Indirecte				
Total				



# ANEXA 2 - Cerere de finanțare - Identificator: PN-III-ID-ERC-2016-2, proiecte de tip 2 - Granturi de Excelență (*Excellence Grant*)

## A. Informații generale Titlul proiectului (max. 200 caractere): Acronim (max. 20 caractere): Competiția ERC: 2014/2015/2016 Durata (în luni): Rezumat (min. 100 / max. 2.000 de caractere): **Directorul de proiect:** Nume: Nume anterioare (dacă este cazul): Prenume: Data nașterii: Doctor din anul: Telefon: Adresa de e-mail: Instituția gazdă a proiectului: Numele instituției: Adresa instituției: Domeniul în care se încadrează proiectul (conform Anexa 4 – 4.1/4.2/4.3) Domeniul: Subdomeniul: Aria de cercetare principală: Aria de cercetare secundară: Aria de cercetare secundară (opțional): **Cuvinte cheie:** 1: 2: 3: 4 (optional): 5 (opțional):

B. Cererea de finanțare depusă la ERC (se atașează copie după propunerea de proiect) și fișa de evaluare. Directorul de proiect va implementa proiectul conform acestei cereri de finanțare.

Deviz antecalcul (lei, pe ani calendaristici):

Se va specifica și justifica solicitarea de buget pe tipuri de cheltuieli.

Capitol de	2016	2017	2018	2019	2020	2021	Total
buget	(lei)						
(cheltuieli)							
Personal							
Logistică							
Deplasare							
Indirecte							
Total							



#### ANEXA 3 – Fișă de evaluare – pentru tipul 1 de proiecte

Va conține două criterii de evaluare :

#### 1. Calitatea științifică a directorului de proiect

- evaluarea se face pe baza documentației depuse la ERC, respectiv la punctul B din ANEXA I, precum și a fișei de evaluare ERC.

#### 2. Calitatea științifică și fezabilitatea propunerii de proiect

- se evaluează componenta de proiect din propunerea ERC ce urmează a fi finanțată din fonduri naționale (evaluarea se face pe baza documentației depuse la punctul C din ANEXA 1).

Rezultatul este de tip admis/respins la finanțare.



### ANEXA 4 – Domenii științifice ERC

### ANEXA 4.1 – Domenii științifice ERC – 2014

Domain Code:	SH
Subdomain Code:	SH1, SH2, SH3, SH4, SH5, SH6
Research Area Code:	SH1_1SH1_15, SH2_1SH2_10,

### DOMAIN SOCIAL SCIENCES AND HUMANITIES

SH1	Markets, Individuals and Institutions: Economics, finance and management
SH1_1	Macroeconomics; monetary economics
SH1_2	International trade, international business, development, economic growth
SH1_3	Econometrics, game theory, experimental design, operations research
SH1_4	Labour economics; institutional economics
SH1_5	Political economy, public economics
SH1_6	Microeconomics, behavioural economics
SH1_7	Industrial organisation
SH1_8	Strategy; entrepreneurship
SH1_9	Technological change, innovation, research & development
SH1_10	Financial markets, asset prices, international finance
SH1_11	Banking, corporate finance, accounting, auditing, insurance
SH1_12	Marketing
SH1_13	Management; operations management
SH1_14	Organisational behaviour; human resource management
SH1_15	History of economic thought, quantitative economic history
SH2	<b>The Social World, Diversity and Common Ground:</b> Sociology, social anthropology, political science, law, communication, science and technology studies
SH2 1	Social structure, inequalities, social mobility
SH2_2	Diversity and identities, gender, interethnic relations
SH2_3	Social policies, welfare and educational systems
SH2_4	Democratisation, social movements, social integration
SH2_5	Political systems and institutions, governance
SH2_6	Conflict and conflict resolution, violence
SH2_7	Legal studies, constitutions, human rights, comparative law
SH2_8	International relations, global and transnational governance
SH2_9	Communication and information, networks, media
SH2_10	Social studies of science and technology
SH3	Environment, Space and Population: Sustainability science, demography, geography, regional studies and planning
SH3_1	Sustainability sciences, environment and resources
SH3_2	Environmental and climate change, societal impact
SH3_3	Environmental and climate policy
SH3_4	Population dynamics; households, family and fertility
SH3_5	Health, ageing and society
SH3_6	Transportation and logistics, tourism
SH3_7	Spatial development, land use, regional planning
SH3_8	Urban, regional and rural studies
SH3_9	Human and social geography

SH3_10	Geographic information systems, spatial data analysis
SH4	<b>The Human Mind and Its Complexity:</b> Cognitive science, psychology, linguistics, philosophy of mind, education
SH4_1	Evolution of mind and cognitive functions, animal communication
SH4_2	Human life-span development
SH4_3	Neuropsychology
SH4_4	Cognitive and experimental psychology: perception, action, and higher cognitive processes
SH4_5	Social psychology
SH4_6	Clinical psychology
SH4_7	Formal, cognitive, functional and computational linguistics
SH4_8	Historical, typological, and comparative linguistics
SH4_9	Origin and acquisition of language and languages, language pathologies
SH4_10	Pragmatics, sociolinguistics, discourse analysis, second language learning
SH4_11	Philosophy of mind, epistemology and logic
SH4_12	Education, teaching and learning
SH5	Cultures and Cultural Production: Literature, philology, cultural studies, arts, philosophy
SH5_1	Classics, ancient literature and art
SH5_2	Theory and history of literature, comparative literature
SH5_3	Philology and palaeography
SH5_4	Visual and performing arts, design, arts-based research
SH5_5	Music and musicology; history of music
SH5_6	History of art and architecture
SH5_7	Museums, exhibitions, conservation and restoration
SH5_8	Cultural studies, symbolic representation, religious studies
SH5_9	Transregional studies
SH5_10	Cultural heritage, cultural identities and memories
SH5_11	Philosophy and history of philosophy
SH6	The Study of the Human Past: Archaeology and history
SH6_1	Historiography, theory and methods of history
SH6_2	Archaeology, archaeometry, landscape archaeology
SH6_3	Prehistory, palaeoanthropology, palaeodemography
SH6_4	Ancient history
SH6_5	Medieval history
SH6_6	Early modern history
SH6_7	Modern and contemporary history
SH6_8	Colonial and post-colonial history
SH6_9	Global history, transnational history, comparative history, entangled histories
SH6_10	Social and economic history
SH6_11	Gender history, history of collective identities and memories
SH6_12	History of ideas, intellectual and cultural history
SH6_13	History of science and technology

## Anexa 4.1 – Domenii științifice ERC – 2014

<b>Domain Code:</b>	PE
Subdomain Code:	PE1, PE2, PE3, PE4, PE5, PE6, PE7, PE8, PE9, PE10
Research Area Code:	PE1_1PE1_21, PE2_1PE2_18,

# DOMAIN PHYSICAL SCIENCES AND ENGINEERING

PE1	<b>Mathematics:</b> 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	Geometry
PE1_6	Topology
PE1_7	Lie groups, Lie algebras
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	Statistics
PE1_15	Discrete mathematics and combinatorics
PE1_16	Mathematical aspects of computer science
PE1_17	Numerical analysis
PE1_18	Scientific computing and data processing
PE1_19	Control theory and optimisation
PE1_20	Application of mathematics in sciences
PE1_21	Application of mathematics in industry and society
PE2	Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics
PE2_1	Fundamental interactions and fields
PE2_2	Particle physics
PE2_3	Nuclear physics
PE2_4	Nuclear astrophysics
PE2_5	Gas and plasma physics
PE2_6	Electromagnetism
PE2_7	Atomic, molecular physics
PE2_8	Ultra-cold atoms and molecules
PE2_9	Optics, non-linear optics and nano-optics
PE2_10	Quantum optics and quantum information
PE2_11	Lasers, ultra-short lasers and laser physics
PE2_12	Acoustics
PE2_13	Relativity
PE2_14	Thermodynamics
PE2_15	Non-linear physics

PE2_16	General physics
PE2_17	Metrology and measurement
PE2_18	Statistical physics (gases)
PE3	Condensed Matter Physics: Structure, electronic properties, fluids, nanosciences, biophysics
PE3_1	Structure of solids and liquids
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, etc.
PE3_5	Semiconductors and insulators: material growth, physical properties
PE3_6	Macroscopic quantum phenomena: superconductivity, superfluidity, etc.
PE3_7	Spintronics
PE3_8	Magnetism and strongly correlated systems
PE3_9	Condensed matter – beam interactions (photons, electrons, etc.)
PE3_10	Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc.
PE3_11	Mesoscopic physics
PE3_12	Molecular electronics
PE3_13	Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.
PE3_14	Fluid dynamics (physics)
PE3_15	Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.
PE3_16	Physics of biological systems
PE4	<b>Physical and Analytical Chemical Sciences:</b> 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	<b>Synthetic Chemistry and Materials:</b> Materials synthesis, structure-properties relations, functional and advanced materials, molecular architecture, organic chemistry
PE5_1	Structural properties of materials
PE5_2	Solid state materials
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

PES_10 Coordination chemistry PES_11 Biological chemistry PES_12 Chemistry of condensed matter PES_13 Homogeneous catalysis PES_14 Macromolecular chemistry PES_15 Polymer chemistry PES_15 Polymer chemistry PES_16 Supramolecular chemistry PES_17 Organic chemistry PES_17 Organic chemistry PES_18 Molecular chemistry PES_19 Combinatorial chemistry PES_19 Computer systems, parallel distributed systems, and information systems, computer science, scientific computing, intelligent systems PE6_1 Computer a systems, parallel distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_2 Computer systems, parallel distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cytytology, security, privacy, quantum crypto PE6_6 Agoirthms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_9 Homan computer interaction and interface, visualisation and natural language processing PE6_10 Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video) PE6_11 Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video) 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, biocomputing, and DNA and molecular computation PE6_14 Systems and Communication Engineering: Electronic, communication, optical and systems engineering PE7_1 Control engineering PE7_2 Signal processing PE7_3 Simulation engineering and modelling PE7_4 Systems and communication Engineering: electronic, communication engineering PE7_1 Communication technology, high-frequency technology PE7_10 Man-machine-interfaces PE7_11 Components and s	PE5_8	Intelligent materials – self assembled materials
PES_10         Colloid chemistry           PES_11         Biological chemistry           PES_12         Chemistry of condensed matter           PES_13         Homogeneous catalysis           PES_14         Macromolecular chemistry           PES_15         Polymer chemistry           PES_16         Supramolecular chemistry           PES_17         Organic chemistry           PES_18         Molecular chemistry           PES_19         Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems           PE6_1         Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems           PE6_1         Computer Science, pervasive computing, ubiquitous computing           PE6_2         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_3         Software engineering, operating systems, computer fanguages           PE6_4         Theoretical computer science, formal methods, and quantum computing           PE6_5         Cryptology, security, privacy, quantum crypto           PE6_5         Applied of Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems		
PES_11         Biological chemistry           PES_12         Chemistry of condensed matter           PES_13         Monogeneous catulysis           PES_14         Macromolecular chemistry           PES_15         Polymer chemistry           PES_16         Supramolecular chemistry           PES_17         Organic chemistry           PES_18         Molecular chemistry           PES_19         Computer systems           PE6_1         Computer Systems computing, intelligent systems           PE6_2         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_3         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_4         Theoretical computer science, formal methods, and quantum computing           PE6_5         Cryptology, security, privacy, quantum crypto           PE6_6         Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer graphics, computer science, formal methods, and quantum computing           PE6_10         Minan computer interaction and interface, visualisation and natural language processing           PE6_11         Muman computer interaction and interface, visu		·
PE5_12         Chemistry of condensed matter           PE5_13         Homogeneous catalysis           PE5_15         Polymer chemistry           PE5_16         Supramolecular chemistry           PE5_17         Organic chemistry           PE5_18         Molecular chemistry           PE5_19         Combinatorial chemistry           PE6_18         Molecular chemistry           PE6_19         Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems           PE6_10         Computer science, and precision of computing and department of the systems, sensor networks, embedded systems, cyber-physical systems           PE6_2         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_3         Software engineering, operating systems, computer languages           PE6_4         Thoreorical computer science, formal methods, and quantum computing           PE6_5         Cryptology, security, privacy, quantum crypto           PE6_6         Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer syabics, computer vision, multi media, computer games           PE6_10         Human computer interaction and interface, visualisati		·
PE5_13 Homogeneous catalysis PE5_14 Macromolecular chemistry PE5_16 Supramolecular chemistry PE5_16 Supramolecular chemistry PE5_17 Organic chemistry PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE5_19 Combinatorial chemistry PE5_19 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_1 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_9 Human computer interaction and interface, situalisation and natural language processing PE6_10 Web and information systems, database systems, information retrieval and digital libraries, data fusion PE6_11 Meahine learning, statistical data processing and applications using signal processing (e.g. speech, image, video) PE6_13 Bioinformatics, biocomputing, and DNA and molecular computation PE7_1 Systems and Communication Engineering: Electronic, communication, optical and systems engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_1 Peroducts and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering PE8_2 Chemical engineering. PE8_3 Civil engineering, marit		· · · · · · · · · · · · · · · · · · ·
PE5_14 Macromolecular chemistry PE5_15 Polymer chemistry PE5_17 Organic chemistry PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE5_19 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_1 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Software engineering, operating systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video) 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, biocomputing, and DNA and molecular computation PE7_1 Control engineering PE7_2 Electrical and electronic system engineering: Electronic, communication, optical and systems engineering PE7_3 Simulation engineering and modelling PE7_3 Systems and Communication Engineering: Electronic, communication, optical and systems engineering PE7_1 Components and systems engineering sensories, actorics, automation PE7_1 Components and systems for applications in medicine, biology and the environment, etc. PE8_1 Networks (communication networks, sensor networks, networks of robots, etc.) PE8_1 Networks (communication networks, sensor networks, networks of robots, etc.) PE8_2 Chemical engineering, energy systems, material engineering PE8_3 Computational engineering PE8_3 Computational engineering PE8_4 Computational engine		
PE5_15 Polymer chemistry PE5_16 Supramolecular chemistry PE5_17 Organic chemistry PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE5_19 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_1 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_1 Theoretical computer science, formal methods, and quantum computing PE6_2 Torpotology, security, privacy, quantum crypto PE6_3 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_10 Web and information systems, database systems, information retrieval and digital libraries, data finsion 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, biocomputing, and DNA and molecular computation PE7_2 Electrical and electronic system engineering PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering amodelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Signal processing PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_11 Components and processes Engineering; Product design, process design and control, construction methods, civil engineering, energy systems		
PE5_16 Supramolecular chemistry PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE6_19 Combinatorial chemistry PE6_10 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_1 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video) PE6_11 Scientific computing, simulation and modelling tools PE6_12 Scientific computing, simulation and modelling tools PE6_13 Bioinformatics, biocomputing, and DNA and molecular computation PE7_1 Control engineering PE7_1 Control engineering PE7_1 Control engineering PE7_2 Electrical and electronic system engineering Electronic, communication, optical and systems engineering PE7_3 Simulation engineering sand modelling PE7_4 Systems engineering, sensories, actorics, automation PE7_5 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_1 Aerospace engineering PE8_2 Chemical engineering, energy systems, material engineering PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment P		, , , , , , , , , , , , , , , , , , ,
PE5_17 Organic chemistry PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE6_11 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_1 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database 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, biocomputing, and DNA and molecular computation PE7_1 Control engineering PE7_2 Electrical and electronic system engineering: Electronic, communication, optical and systems engineering PE7_2 Electrical and electronic system engineering PE7_3 Signal processing PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_10 Components and systems for applications in medicine, biology and the environment, etc. PE8_1 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering PE8_3 Chemical engineering.		
PE5_18         Molecular chemistry           PE5_19         Combinatorial chemistry           PE6         Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems           PE6_1         Computer architecture, pervasive computing, ubiquitous computing           PE6_2         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_3         Software engineering, operating systems, computer languages           PE6_4         Theoretical computer science, formal methods, and quantum computing           PE6_5         Cryptology, security, privacy, quantum crypto           PE6_6         Algorithms, distributed, parallel and network algorithms, algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_10         Web and information systems, database 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         Signification computing, simulation and modelling tools           PS5_1         Systems and Communication		
PE5_19         Combinatorial chemistry           PE6         Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems           PE6_1         Computer architecture, pervasive computing, ubiquitous computing           PE6_2         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_3         Software engineering, operating systems, computer languages           PE6_4         Theoretical computer science, formal methods, and quantum computing           PE6_5         Cryptology, security, privacy, quantum crypto           PE6_6         Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer graphics, computer vision, multi media, computer games           PE6_9         Human computer interaction and interface, visualisation and natural language processing           Web and information systems, database systems, information retrieval and digital libraries, data fusion         Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video)           PE6_10         Mechine learning, statistical data processing and applications using signal processing (e.g. speech, image, video)           PE6_11         Bioinformatics, biocomputing, simulation and modelling tools           PE7_12<		<u> </u>
PE6         Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems           PE6_1         Computer architecture, pervasive computing, ubiquitous computing           PE6_2         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_3         Software engineering, operating systems, computer languages           PE6_4         Theoretical computer science, formal methods, and quantum computing           PE6_5         Cryptology, security, privacy, quantum crypto           PE6_6         Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer graphics, computer vision, multi media, computer games           PE6_9         Human computer interaction and interface, visualisation and natural language processing           PE6_10         Web and information systems, database 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, biocomputing, and DNA and molecular computation           PE7_10         Control engineering           PE7		·
PE6_1 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing Web and information systems, database 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, biocomputing, and DNA and molecular computation PE7_1 Control engineering PE7_2 Electrical and electronic system engineering: Electronic, communication, optical and systems engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensories, actories, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_1 Robotics PE7_10 Robotics PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_1 Aerospace engineering; energy systems, material engineering PE8_1 Aerospace engineering etchnical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		·
PE6_2         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_3         Software engineering, operating systems, computer languages           PE6_5         Theoretical computer science, formal methods, and quantum computing           PE6_5         Cryptology, security, privacy, quantum crypto           PE6_6         Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer graphics, computer vision, multi media, computer games           PE6_9         Human computer interaction and interface, visualisation and natural language processing           PE6_10         Web and information systems, database 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, biocomputing, and DNA and molecular computation           PE7         Systems and Communication Engineering: Electronic, communication, optical and systems engineering           PE7_1         Control engineering and modelling           PE7_2         Simulation engineering, sensorics, actorics, automation           PE7_3         Micro- an	PE6	scientific computing, intelligent systems
PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing Web and information systems, database 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, biocomputing, and DNA and molecular computation PE7_1 Control engineering PE7_2 Electrical and electronic system engineering: Electronic, communication, optical and systems engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_ Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering PE8_1 Acrospace engineering PE8_1 Cemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering	PE6_1	
PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database 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, biocomputing, and DNA and molecular computation  PE7 PE7 Systems and Communication Engineering: Electronic, communication, optical and systems engineering PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8 PP6_8 Aerospace engineering, energy systems, material engineering PE8_1 Aerospace engineering, technical chemistry PE8_1 Chemical engineering, technical chemistry PE8_2 Chemical engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_2	
PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database 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_13 Bioinformatics, biocomputing, and DNA and molecular computation  PE7_1 Systems and Communication Engineering: Electronic, communication, optical and systems engineering PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_1 Components and systems for applications in medicine, biology and the environment, etc.  PE8_ Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering PE8_1 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_3	Software engineering, operating systems, computer languages
PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database 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, biocomputing, and DNA and molecular computation  PE7_1 Control engineering PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8_1 Chemical engineering, energy systems, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_4	Theoretical computer science, formal methods, and quantum computing
PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing Web and information systems, database systems, information retrieval and digital libraries, data fusion Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video)  PE6_11 Scientific computing, simulation and modelling tools PE6_13 Bioinformatics, biocomputing, and DNA and molecular computation  PE7 Systems and Communication Engineering: Electronic, communication, optical and systems engineering PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_ Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, nergy systems, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_5	Cryptology, security, privacy, quantum crypto
PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database systems, information retrieval and digital libraries, data fusion 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, biocomputing, and DNA and molecular computation PE7 Systems and Communication Engineering: Electronic, communication, optical and systems engineering PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensories, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_1 Aerospace engineering, energy systems, material engineering PE8_1 Aerospace engineering, technical chemistry PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_6	Algorithms, distributed, parallel and network algorithms, algorithmic game theory
PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database 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, biocomputing, and DNA and molecular computation PE7 Systems and Communication Engineering: Electronic, communication, optical and systems engineering PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering PE8_1 Aerospace engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_7	Artificial intelligence, intelligent systems, multi agent systems
PE6_10 Web and information systems, database 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, biocomputing, and DNA and molecular computation PE7 Systems and Communication Engineering: Electronic, communication, optical and systems engineering PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_1 Aerospace engineering PE8_1 Aerospace engineering, technical chemistry PE8_2 Chemical engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_8	Computer graphics, computer vision, multi media, computer games
FE6_10 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, biocomputing, and DNA and molecular computation  PE7 Systems and Communication Engineering: Electronic, communication, optical and systems engineering  PE7_1 Control engineering  PE7_2 Electrical and electronic system engineering  PE7_3 Simulation engineering and modelling  PE7_4 Systems engineering, sensorics, actorics, automation  PE7_5 Micro- and nanoelectronics, optoelectronics and photonics  PE7_6 Communication technology, high-frequency technology  PE7_7 Signal processing  PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.)  PE7_9 Man-machine-interfaces  PE7_10 Robotics  PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8_1 Aerospace engineering, energy systems, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_9	
PE6_12 Scientific computing, simulation and modelling tools PE6_13 Bioinformatics, biocomputing, and DNA and molecular computation  PE7 Systems and Communication Engineering: Electronic, communication, optical and systems engineering PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_1 Aerospace engineering, energy systems, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_10	fusion
PE6_13 Bioinformatics, biocomputing, and DNA and molecular computation  PE7 Systems and Communication Engineering: Electronic, communication, optical and systems engineering  PE7_1 Control engineering  PE7_2 Electrical and electronic system engineering  PE7_3 Simulation engineering and modelling  PE7_4 Systems engineering, sensorics, actorics, automation  PE7_5 Micro- and nanoelectronics, optoelectronics and photonics  PE7_6 Communication technology, high-frequency technology  PE7_7 Signal processing  PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.)  PE7_9 Man-machine-interfaces  PE7_10 Robotics  PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_11	
PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8_1 Aerospace engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston enginees	PE6_12	
PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8_1 Aerospace engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_13	
PE7_1 Control engineering PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8_1 Aerospace engineering, energy systems, material engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7	
PE7_2 Electrical and electronic system engineering PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8_ Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7 1	
PE7_3 Simulation engineering and modelling PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc. PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		
PE7_4 Systems engineering, sensorics, actorics, automation PE7_5 Micro- and nanoelectronics, optoelectronics and photonics PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		
PE7_5 Micro- and nanoelectronics, optoelectronics and photonics  PE7_6 Communication technology, high-frequency technology  PE7_7 Signal processing  PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.)  PE7_9 Man-machine-interfaces  PE7_10 Robotics  PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		
PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		
PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		
PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.)  PE7_9 Man-machine-interfaces  PE7_10 Robotics  PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		
PE7_9 Man-machine-interfaces  PE7_10 Robotics  PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		
PE7_10 Robotics  PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		
PE7_11 Components and systems for applications in medicine, biology and the environment, etc.  Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		
PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy systems, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines		Components and systems for applications in medicine, biology and the environment, etc.
PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE8	
PE8_3 Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE8_1	
PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE8_2	Chemical engineering, technical chemistry
PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE8_3	Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment
	PE8_4	Computational engineering
PE8_6 Energy systems (production, distribution, application)	PE8_5	Fluid mechanics, hydraulic-, turbo-, and piston engines
	DEO.	Energy systems (production, distribution, application)

PE8_7	Micro (system) engineering
PE8_8	Mechanical and manufacturing engineering (shaping, mounting, joining, separation)
PE8_9	Materials engineering (biomaterials, metals, ceramics, polymers, composites, etc.)
PE8_10	Production technology, process engineering
PE8_11	Industrial design (product design, ergonomics, man-machine interfaces, etc.)
PE8_12	Sustainable design (for recycling, for environment, eco-design)
PE8_13	Lightweight construction, textile technology
PE8_14	Industrial bioengineering
PE8_15	Industrial biofuel production
PE8_16	Architectural engineering
PE9	<b>Universe Sciences:</b> Astro-physics/chemistry/biology; solar system; stellar, galactic and extragalactic astronomy, planetary systems, cosmology, space science, instrumentation
PE9_1	Solar and interplanetary physics
PE9_2	Planetary systems sciences
PE9_3	Interstellar medium
PE9_4	Formation of stars and planets
PE9_5	Astrobiology
PE9_6	Stars and stellar systems
PE9_7	The Galaxy
PE9_8	Formation and evolution of galaxies
PE9_9	Clusters of galaxies and large scale structures
PE9_10	High energy and particles astronomy – X-rays, cosmic rays, gamma rays, neutrinos
PE9_11	Relativistic astrophysics
PE9_12	Dark matter, dark energy
PE9_13	Gravitational astronomy
PE9_14	Cosmology
PE9_15	Space Sciences
PE9_16	Very large data bases: archiving, handling and analysis
PE9_17	Instrumentation - telescopes, detectors and techniques
PE10	<b>Earth System Science:</b> 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, volcanology
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, crystal chemistry, isotope geochemistry, thermodynamics
PE10_12	Sedimentology, soil science, palaeontology, earth evolution
PE10_13	Physical geography
PE10_14	Earth observations from space/remote sensing
PE10_15	Geomagnetism, palaeomagnetism
	· · ·
PE10_16	Ozone, upper atmosphere, ionosphere
	· · ·

## Anexa 4.1 – Domenii științifice ERC – 2014

<b>Domain Code:</b>	LS
Subdomain Code:	LS1, LS2, LS3, LS4, LS5, LS6, LS7, LS8, LS9
Research Area Code:	LS1_1LS1_11, LS2_1LS2_14,

### DOMAIN LIFE SCIENCES

LS1	<b>Molecular and Structural Biology and Biochemistry:</b> Molecular synthesis, modification and interaction, biochemistry, biophysics, structural biology, metabolism, signal transduction
LS1_1	Molecular interactions
LS1_2	General biochemistry and metabolism
LS1_3	DNA synthesis, modification, repair, recombination and degradation
LS1_4	RNA synthesis, processing, modification and degradation
LS1_5	Protein synthesis, modification and turnover
LS1_6	Lipid synthesis, modification and turnover
LS1_7	Carbohydrate synthesis, modification and turnover
LS1_8	Biophysics (e.g. transport mechanisms, bioenergetics, fluorescence)
LS1_9	Structural biology (crystallography and EM)
LS1_10	Structural biology (NMR)
LS1_11	Biochemistry and molecular mechanisms of signal transduction
LS2	Genetics, Genomics, Bioinformatics and Systems Biology: Molecular and population genetics, genomics, transcriptomics, proteomics, metabolomics, bioinformatics, computational biology, biostatistics, biological modelling and simulation, systems biology, genetic epidemiology
LS2_1	Genomics, comparative genomics, functional genomics
LS2_2	Transcriptomics
LS2_3	Proteomics
LS2_4	Metabolomics
LS2_5	Glycomics
LS2_6	Molecular genetics, reverse genetics and RNAi
LS2_7	Quantitative genetics
LS2_8	Epigenetics and gene regulation
LS2_9	Genetic epidemiology
LS2_10	Bioinformatics
LS2_11	Computational biology
LS2_12	Biostatistics
LS2_13	Systems biology
LS2_14	Biological systems analysis, modelling and simulation
LS3	<b>Cellular and Developmental Biology:</b> Cell biology, cell physiology, signal transduction, organogenesis, developmental genetics, pattern formation in plants and animals, stem cell biology
LS3_1	Morphology and functional imaging of cells
LS3_2	Cell biology and molecular transport mechanisms
LS3_3	Cell cycle and division
LS3_4	Apoptosis
LS3_5	Cell differentiation, physiology and dynamics
LS3_6	Organelle biology
LS3_7	Cell signalling and cellular interactions
LS3_8	Signal transduction
LS3_9	Development, developmental genetics, pattern formation and embryology in animals

LS3_11   Cell genetics	LS3_10	Development, developmental genetics, pattern formation and embryology in plants
LS3_12 Stem cell biology Physiology, Pathophysiology and Endocrinology: Organ physiology, pathophysiology Comparative physiology and pathophysiology LS4_12 Comparative physiology and pathophysiology LS4_2 Comparative physiology and pathophysiology LS4_3 Endocrinology LS4_4 Ageing LS4_5 Metabolism, biological basis of metabolism related disorders LS4_6 Cancer and its biological basis LS4_7 Cardiovascular diseases LS4_7 Cardiovascular diseases LS4_8 Ron-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)  Neurosciences and Neural Disorders: Neurobiology, neuroanatomy, neurophysiology, neuroimaging, systems neuroscience, neurological and psychiatric disorders LS5_1 Neurochemistry, neuropharmacology, neuroimaging, systems neuroscience, neurological and psychiatric disorders LS5_2 Molecular and cellular neuroscience LS5_3 Neurochemistry and neurophysiology LS5_4 Sensory systems (e.g. visual system, auditory system) LS5_5 Neurochemistry and neuropharmacology LS5_5 Neurochemistry and neuropharmacology LS5_5 Neurochemistry and neuropharmacology LS5_6 Developmental neurobiology LS5_7 Cognition (e.g. learning, memory, emotions, speech) LS5_8 Behavioural neuroscience (e.g. sleep, consciousness, handedness) LS5_9 Systems neuroscience LS5_11 Neurological disorders (e.g. sleep, consciousness, handedness) LS5_12 Physihatric disorders (e.g. sleep, consciousness, handedness) LS5_12 Physihatric disorders (e.g. shr)ophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder) Immunity and Information Himmunity LS6_1 Innate immunity and tolerance LS6_1 Innate immunity and tolerance LS6_1 Innate immunity related disorders (e.g. vaccination, antibiotics, fungicide) LS6_1 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide) LS6_1 Prevention and		
Physiology, Pathophysiology and Endocrinology: Organ physiology, pathophysiology, endocrinology, metabolism, ageing, tumorigenesis, cardiovascular disease, metabolic syndrome		
endocrnnology, metanolism, ageing, tumorigenesis, cardiovascular disease, metanolic syndrome  1.84_2		Physiology, Pathophysiology and Endocrinology: Organ physiology, pathophysiology,
LS4_2 Comparative physiology and pathophysiology LS4_3 Endocrinology LS4_4 Ageing LS4_5 Metabolism, biological basis of metabolism related disorders LS4_6 Cancer and its biological basis LS4_7 Cardiovascular discases LS4_8 Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)  Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)  Neurosciences and Neural Disorders: Neurobiology, neuroanatomy, neurophysiology, neuroenemistry, neuropharmacology, neuroimaging, systems neuroscience, neurological and psychiatric disorders  Neuroanatomy and neurophysiology LS5_1 Neuroanatomy and neuropharmacology LS5_2 Molecular and cellular neuroscience LS5_3 Neurochemistry and neuropharmacology LS5_4 Sensory systems (e.g. visual system, auditory system) LS5_5 Mechanisms of pain LS5_6 Developmental neurobiology LS5_7 Cognition (e.g. learning, memory, emotions, speech) LS5_8 Behavioural neuroscience (e.g. sleep, consciousness, handedness) LS5_10 Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease) LS5_11 Neurological disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, hipolar disorder, attention deficit hyperactivity disordery Inmunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection LS6_1 Immunosignalling LS6_3 Phagocytosis and cellular immunity LS6_4 Immunosignalling LS6_6 Immunosignalling LS6_6 Immunosignalling LS6_10 Parasitology LS6_10 Parasitology LS6_10 Parasitology LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide) LS6_11 Veterinary medicine and infectious diseases in animals Diagnostic Tools, Therapies and Public Health: Actiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerat		
LS4_3 Endocrinology LS4_4 Ageing LS4_5 Metabolism, biological basis of metabolism related disorders LS4_6 Cancer and its biological basis LS4_7 Cardiovascular diseases LS4_7 Cardiovascular diseases LS4_8 Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)  Neurosciences and Neural Disorders: Neurobiology, neuronanatomy, neurophysiology, neuronanatomy, neurophysiology LS5_1 Neuronanatomy and neurophysiology LS5_2 Neuronatomy and neurophysiology LS5_3 Neurochemistry and neuropharmacology LS5_3 Neurochemistry and neuropharmacology LS5_4 Sensory systems (e.g. visual system, auditory system) LS5_5 Mechanisms of pain LS5_5 Developmental neurobiology LS5_7 Cognition (e.g. learning, memory, emotions, speech) LS5_8 Behavioural neuroscience (e.g. sleep, consciousness, handedness) LS5_9 Systems neuroscience LS5_10 Neurolinaging and computational neuroscience LS5_11 Neurological disorders (e.g. shizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder) LS6_1 Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection LS6_1 Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection LS6_1 Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide) LS6_1 Immunological memory and tolerance LS6_0 Immunological memory and tolerance LS6_10 Veterinary medicine and infectious diseases in animals Diaponstic Tools, Therapies and Pub	LS4_1	Organ physiology and pathophysiology
LS4_4 Ageing  LS4_5 Metabolism, biological basis of metabolism related disorders  LS4_6 Cancer and its biological basis  LS4_7 Cardiovascular diseases  LS4_8 Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)  Neurosciences and Neural Disorders: Neurobiology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, neuroimaging, systems neuroscience, neurological and psychiatric disorders  LS5_1 Neuroanatomy and neurophysiology  LS5_2 Molecular and cellular neuroscience  LS5_3 Neurochemistry and neuropharmacology  LS5_4 Sensory systems (e.g. visual system, auditory system)  LS5_5 Mechanisms of pain  LS5_5 Developmental neurobiology  LS5_6 Developmental neurobiology  LS5_7 Cognition (e.g. learning, memory, emotions, speech)  LS5_8 Behavioural neuroscience (e.g. sleep, consciousness, handedness)  LS5_9 Systems neuroscience  LS5_11 Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)  Psychiatric disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)  Psychiatric disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)  LS5_12 Psychiatric disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)  LS6_11 Immunity and inflammation  LS6_12 Immunity and inflammation  LS6_3 Phagocytosis and cellular immunity  LS6_4 Immunosignalling  LS6_5 Adaptive immunity  LS6_6 Immunosignalling  LS6_10 Parasiology  LS6_10 Parasiology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7_14 Medical engineering and technology  LS6_15 Parasiology  Diagnostic tools (e.g. genetic, imaging)  LS7_15 Medical engineering and technology  LS7_15 Pharmacology, pharmacologonomics, drug discovery and design, drug therapy	LS4_2	Comparative physiology and pathophysiology
LS4_5 Metabolism, biological basis of metabolism related disorders  LS4_6 Cancer and its biological basis  LS4_7 Cardiovascular diseases  Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)  Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)  Neurosciences and Neural Disorders: Neurobiology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, neuroimaging, systems neuroscience, neurological and psychiatric disorders  Neurochemistry and neurophysiology  LS5_1 Neurochemistry and neuropharmacology  LS5_2 Molecular and cellular neuroscience  LS5_3 Neurochemistry and neuropharmacology  LS5_5 Mechanisms of pain  LS5_6 Developmental neurobiology  LS5_7 Cognition (e.g. learning, memory, emotions, speech)  LS5_8 Behavioural neuroscience (e.g. sleep, consciousness, handedness)  LS5_9 Systems neuroscience  LS5_10 Neuroimaging and computational neuroscience  LS5_11 Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)  Psychiatric disorders (e.g. Schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder;  LS6_1 Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection  LS6_1 Immunological memory and tolerance  LS6_3 Phagocytosis and cellular immunity  LS6_4 Immunosignalling  LS6_5 Immunological beatory and tolerance  LS6_10 Parasitology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veteriary medicine and infectious diseases in autoimals  Diagnostic Tools, Therapies and Public Health: Actiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, cl	LS4_3	Endocrinology
LS4_6 Cancer and its biological basis  LS4_7 Cardiovascular diseases  Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)  Neurosciences and Neural Disorders: Neurobiology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology  LS5_1 Neuroanatomy and neurophysiology  Neurosciences  LS5_3 Neurochemistry and neurophysiology  LS5_4 Sensory systems (e.g. visual system, auditory system)  LS5_5 Mechanisms of pain  LS5_6 Developmental neurobiology  LS5_7 Cognition (e.g. learning, memory, emotions, speech)  LS5_8 Behavioural neuroscience (e.g. sleep, consciousness, handedness)  LS5_10 Neurological disorders (e.g. sleep, consciousness, handedness)  Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)  LS5_11 Neurological disorders (e.g. shizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)  LS6_1 Innumnity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection  LS6_2 Adaptive immunity  LS6_3 Phagocytosis and cellular immunity  LS6_4 Immunoignalling  Immunoignalling  LS6_6 Immunoignalling  LS6_9 Microbiology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  Diagnostic Tools, Therapies and Public Health: Actiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Modical engineering and technology  LS7_3 Pharmacology, pharmacogen	LS4_4	Ageing
LS4_7 Cardiovascular diseases Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)  LS5_1 Neurosciences and Neural Disorders: Neurobiology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, neuroimaging, systems neuroscience, neurological and psychiatric disorders  LS5_1 Neuroanatomy and neurophysiology  LS5_2 Molecular and cellular neuroscience  LS5_3 Neurochemistry and neuropharmacology  LS5_4 Sensory systems (e.g. visual system, auditory system)  LS5_5 Developmental neurobiology  LS5_6 Developmental neurobiology  LS5_7 Cognition (e.g. learning, memory, emotions, speech)  LS5_8 Behavioural neuroscience (e.g. sleep, consciousness, handedness)  LS5_1 Neuroinging and computational neuroscience  LS5_11 Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)  LS5_12 Psychiatric disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)  LS6_1 Innumority and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection  LS6_1 Innumority and Inflammation  LS6_2 Adaptive immunity  LS6_3 Phagocytosis and cellular immunity  LS6_4 Immunosignalling  LS6_6 Immunosignalling  LS6_9 Bacteriology  LS6_9 Bacteriology  LS6_10 Perasitology  LS6_10 Perasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Provention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_10 Perasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Prevention and treatment of infection disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  Diagnostic tools, Ce.g. genetic, imaging)  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS4_5	Metabolism, biological basis of metabolism related disorders
LS4_8	LS4_6	Cancer and its biological basis
LS5_8 december of particular diseases) LS5_1 Neurochemistry, neuropharmacology, neuroimaging, systems neuroscience, neurological and psychiatric disorders LS5_1 Neuroanatomy and neurophysiology LS5_2 Molecular and cellular neuroscience LS5_3 Neurochemistry and neuropharmacology LS5_4 Sensory systems (e.g. visual system, auditory system) LS5_5 Developmental neurobiology LS5_6 Developmental neurobiology LS5_7 Cognition (e.g. learning, memory, emotions, speech) LS5_8 Behavioural neuroscience (e.g. sleep, consciousness, handedness) LS5_9 Systems neuroscience LS5_10 Neuroimaging and computational neuroscience LS5_11 Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease) Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder) LS6_1 Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection LS6_1 Innate immunity and inflammation LS6_2 Adaptive immunity LS6_4 Immunosignalling LS6_5 Immunogenetics LS6_6 Immunogenetics LS6_6 Immunogenetics LS6_1 Parasitology LS6_10 Parasitology LS6_10 Parasitology LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide) LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity) LS6_13 Veterinary medicine and infectious diseases in animals  LS7_1 Medical engineering and technology LS7_2 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics LS7_2 Diagnostic tools (e.g. genetic, imaging) LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS4_7	Cardiovascular diseases
LS5	LS4_8	
I.S5_1   Neuroanatomy and neurophysiology		
LS5_1       Neuroanatomy and neurophysiology         LS5_2       Molecular and cellular neuroscience         LS5_3       Neurochemistry and neuropharmacology         LS5_4       Sensory systems (e.g. visual system, auditory system)         LS5_5       Mechanisms of pain         LS5_6       Developmental neurobiology         LS5_7       Cognition (e.g. learning, memory, emotions, speech)         LS5_8       Behavioural neuroscience (e.g. sleep, consciousness, handedness)         LS5_9       Systems neuroscience         LS5_10       Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)         LS5_11       Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)         LS5_12       Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)         LS6_11       Inmunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection         LS6_2       Adaptive immunity         LS6_3       Phagocytosis and cellular immunity         LS6_4       Immunological memory and tolerance         LS6_5       Immunological memory and tolerance         LS6_6       Immunological memory and tolerance         LS6_10       P	LS5	
LS5_2       Molecular and cellular neuroscience         LS5_3       Neurochemistry and neuropharmacology         LS5_4       Sensory systems (e.g. visual system, auditory system)         LS5_5       Mechanisms of pain         LS5_6       Developmental neurobiology         LS5_7       Cognition (e.g. learning, memory, emotions, speech)         LS5_8       Behavioural neuroscience (e.g. sleep, consciousness, handedness)         LS5_9       Systems neuroscience         LS5_10       Neuroimaging and computational neuroscience         LS5_11       Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)         LS5_12       Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)         LS6_1       Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection         LS6_1       Innae immunity and inflammation         LS6_2       Adaptive immunity         LS6_3       Phagocytosis and cellular immunity         LS6_3       Inmunological memory and tolerance         LS6_5       Immunological memory and tolerance         LS6_6       Immunological memory and tolerance         LS6_1       Microbiology         LS6_1<	LS5_1	
LS5_3   Neurochemistry and neuropharmacology     LS5_4   Sensory systems (e.g. visual system, auditory system)     LS5_5   Mechanisms of pain     LS5_6   Developmental neurobiology     LS5_7   Cognition (e.g. learning, memory, emotions, speech)     LS5_8   Behavioural neuroscience (e.g. sleep, consciousness, handedness)     LS5_9   Systems neuroscience     LS5_10   Neuroimaging and computational neuroscience     LS5_11   Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)     LS5_12   Psychiatric disorders (e.g. Schlzophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)     LS6_1   Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection     LS6_2   Adaptive immunity     LS6_3   Phagocytosis and cellular immunity     LS6_4   Immunosignalling     LS6_5   Immunological memory and tolerance     LS6_6   Immunological memory and tolerance     LS6_7   Microbiology     LS6_8   Virology     LS6_9   Bacteriology     LS6_10   Parasitology     LS6_11   Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)     LS6_11   Prevention and treatment of infections diseases in animals     LS7_1   Diagnostic Tools, Therapies and Public Health: Actiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics     LS7_1   Diagnostic tools (e.g. genetic, imaging)     LS7_2   Diagnostic tools (e.g. genetic, imaging)     LS7_3   Pharmacology, pharmacologenomics, drug discovery and design, drug therapy		· · · · · · · · · · · · · · · · · · ·
LS5_4       Sensory systems (e.g. visual system, auditory system)         LS5_5       Mechanisms of pain         LS5_6       Developmental neurobiology         LS5_7       Cognition (e.g. learning, memory, emotions, speech)         LS5_8       Behavioural neuroscience (e.g. sleep, consciousness, handedness)         LS5_9       Systems neuroscience         LS5_10       Neuroimaging and computational neuroscience         LS5_11       Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)         LS5_12       Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)         LS6_1       Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection         LS6_1       Innate immunity and inflammation         LS6_2       Adaptive immunity         LS6_3       Phagocytosis and cellular immunity         LS6_4       Immunosignalling         LS6_5       Immunosignalling         LS6_6       Immunogenetics         LS6_7       Microbiology         LS6_8       Virology         LS6_10       Parasitology         LS6_11       Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungic		
LS5_5       Mechanisms of pain         LS5_6       Developmental neurobiology         LS5_7       Cognition (e.g. learning, memory, emotions, speech)         LS5_8       Behavioural neuroscience (e.g. sleep, consciousness, handedness)         LS5_9       Systems neuroscience         LS5_10       Neuroimaging and computational neuroscience         LS5_11       Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)         LS5_12       Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)         LS6_1       Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection         LS6_1       Innate immunity and inflammation         LS6_2       Adaptive immunity         LS6_3       Phagocytosis and cellular immunity         LS6_4       Immunosignalling         LS6_5       Immunological memory and tolerance         LS6_6       Immunogenetics         LS6_7       Microbiology         LS6_10       Parasitology         LS6_11       Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)         LS6_12       Biological basis of immunity related disorders (e.g. autoimmunity)		
LS5_6       Developmental neurobiology         LS5_7       Cognition (e.g. learning, memory, emotions, speech)         LS5_8       Behavioural neuroscience (e.g. sleep, consciousness, handedness)         LS5_9       Systems neuroscience         LS5_10       Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)         LS5_11       Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)         LS6_1       Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection         LS6_1       Innate immunity and inflammation         LS6_2       Adaptive immunity         LS6_3       Phagocytosis and cellular immunity         LS6_4       Immunosignalling         LS6_5       Immunological memory and tolerance         LS6_6       Immunogenetics         LS6_1       Virology         LS6_10       Parasitology         LS6_11       Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)         LS6_12       Biological basis of immunity related disorders (e.g. autoimmunity)         LS6_13       Veterinary medicine and infectious diseases in animals         Diagnostic Tools, Therapies and Public Health: Actiology, di		
LS5_7       Cognition (e.g. learning, memory, emotions, speech)         LS5_8       Behavioural neuroscience (e.g. sleep, consciousness, handedness)         LS5_9       Systems neuroscience         LS5_10       Neuroimaging and computational neuroscience         LS5_11       Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)         LS5_12       Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)         LS6_12       Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection         LS6_1       Innate immunity and inflammation         LS6_2       Adaptive immunity         LS6_3       Phagocytosis and cellular immunity         LS6_4       Immunosignalling         LS6_5       Immunological memory and tolerance         LS6_6       Immunogenetics         LS6_7       Microbiology         LS6_8       Virology         LS6_9       Bacteriology         LS6_10       Parasitology         LS6_11       Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)         LS6_13       Veterinary medicine and infectious diseases in animals         LS6_13       Veteri		
LS5_8       Behavioural neuroscience (e.g. sleep, consciousness, handedness)         LS5_9       Systems neuroscience         LS5_10       Neuroimaging and computational neuroscience         LS5_11       Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)         LS5_12       Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)         LS6       Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection         LS6_1       Innate immunity and inflammation         LS6_2       Adaptive immunity         LS6_3       Phagocytosis and cellular immunity         LS6_4       Immunosignalling         LS6_5       Immunological memory and tolerance         LS6_6       Immunogenetics         LS6_7       Microbiology         LS6_8       Virology         LS6_9       Bacteriology         LS6_10       Parasitology         LS6_11       Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)         LS6_12       Biological basis of immunity related disorders (e.g. autoimmunity)         LS6_13       Veterinary medicine and infectious diseases in animials         LS6_13		
LS5_9       Systems neuroscience         LS5_10       Neuroimaging and computational neuroscience         LS5_11       Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)         LS5_12       Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)         LS6       Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection         LS6_1       Innate immunity and inflammation         LS6_2       Adaptive immunity         LS6_3       Phagocytosis and cellular immunity         LS6_4       Immunosignalling         LS6_5       Immunological memory and tolerance         LS6_6       Immunogenetics         LS6_7       Microbiology         LS6_8       Virology         LS6_10       Parasitology         LS6_11       Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)         LS6_12       Biological basis of immunity related disorders (e.g. autoimmunity)         LS6_13       Veterinary medicine and infectious diseases in animals         LS7_1       Medical engineering and technology       pharmacology, clinical medicine, regenerative medicine, medical ethics         LS7_1       Diagno		
LS5_10       Neuroimaging and computational neuroscience         LS5_11       Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)         LS5_12       Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)         LS6       Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection         LS6_12       Adaptive immunity         LS6_23       Phagocytosis and cellular immunity         LS6_44       Immunosignalling         LS6_55       Immunological memory and tolerance         LS6_66       Immunological memory and tolerance         LS6_70       Microbiology         LS6_8       Virology         LS6_10       Parasitology         LS6_11       Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)         LS6_12       Biological basis of immunity related disorders (e.g. autoimmunity)         LS6_13       Veterinary medicine and infectious diseases in animals         LS7       Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics         LS7_1       Medical engineering and technology         LS7_		
LS5_11 Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)  LS5_12 Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)  LS6 Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection  LS6_1 Innate immunity and inflammation  LS6_2 Adaptive immunity  LS6_3 Phagocytosis and cellular immunity  LS6_4 Immunosignalling  LS6_5 Immunological memory and tolerance  LS6_6 Immunological memory and tolerance  LS6_6 Virology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy		
LS5_12 Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)  LS6 Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection  LS6_1 Innate immunity and inflammation  LS6_2 Adaptive immunity  LS6_3 Phagocytosis and cellular immunity  LS6_4 Immunosignalling  LS6_5 Immunological memory and tolerance  LS6_6 Immunogenetics  LS6_6 Immunogenetics  LS6_7 Microbiology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy		
LS6 Immunity and Infection: The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection  LS6_1 Innate immunity and inflammation  LS6_2 Adaptive immunity  LS6_3 Phagocytosis and cellular immunity  LS6_4 Immunosignalling  LS6_5 Immunological memory and tolerance  LS6_6 Immunogenetics  LS6_7 Microbiology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy		
prevention and treatment of infection  LS6_1 Innate immunity and inflammation  LS6_2 Adaptive immunity  LS6_3 Phagocytosis and cellular immunity  LS6_4 Immunosignalling  LS6_5 Immunological memory and tolerance  LS6_6 Immunogenetics  LS6_7 Microbiology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS5_12	disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)
LS6_2 Adaptive immunity  LS6_3 Phagocytosis and cellular immunity  LS6_4 Immunosignalling  LS6_5 Immunological memory and tolerance  LS6_6 Immunogenetics  LS6_7 Microbiology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7  Diagnostic Tools, Therapies and Public Health: Actiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS6	
LS6_3 Phagocytosis and cellular immunity  LS6_4 Immunosignalling  LS6_5 Immunological memory and tolerance  LS6_6 Immunogenetics  LS6_7 Microbiology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7  Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS6_1	Innate immunity and inflammation
LS6_4 Immunosignalling  LS6_5 Immunological memory and tolerance  LS6_6 Immunogenetics  LS6_7 Microbiology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7  Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS6_2	Adaptive immunity
LS6_5 Immunological memory and tolerance  LS6_6 Immunogenetics  LS6_7 Microbiology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS6_3	Phagocytosis and cellular immunity
LS6_6 Immunogenetics  LS6_7 Microbiology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS6_4	Immunosignalling
LS6_7 Microbiology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS6_5	Immunological memory and tolerance
LS6_7 Microbiology  LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS6_6	Immunogenetics
LS6_8 Virology  LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy		
LS6_9 Bacteriology  LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy		
LS6_10 Parasitology  LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy		
LS6_11 Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)  LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS6_10	
LS6_12 Biological basis of immunity related disorders (e.g. autoimmunity)  LS6_13 Veterinary medicine and infectious diseases in animals  LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy		
LS7 Diagnostic Tools, Therapies and Public Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS6_12	Biological basis of immunity related disorders (e.g. autoimmunity)
public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics  LS7_1 Medical engineering and technology  LS7_2 Diagnostic tools (e.g. genetic, imaging)  LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS6_13	Veterinary medicine and infectious diseases in animals
LS7_2 Diagnostic tools (e.g. genetic, imaging) LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS7	
LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	LS7_1	Medical engineering and technology
	LS7_2	Diagnostic tools (e.g. genetic, imaging)
	LS7_3	Pharmacology, pharmacogenomics, drug discovery and design, drug therapy
	LS7_4	

LS7_5	Toxicology
LS7_6	Gene therapy, cell therapy, regenerative medicine
LS7_7	Radiation therapy
LS7_8	Health services, health care research
LS7_9	Public health and epidemiology
LS7_10	Environment and health risks, occupational medicine
LS7_11	Medical ethics
LS8	<b>Evolutionary, Population and Environmental Biology:</b> Evolution, ecology, animal behaviour, population biology, biodiversity, biogeography, marine biology, eco-toxicology, microbial ecology
LS8_1	Ecology (theoretical and experimental; population, species and community level)
LS8_2	Population biology, population dynamics, population genetics
LS8_3	Systems evolution, biological adaptation, phylogenetics, systematics, comparative biology
LS8_4	Biodiversity, conservation biology, conservation genetics, invasion biology
LS8_5	Evolutionary biology: evolutionary ecology and genetics, co-evolution
LS8_6	Biogeography, macro-ecology
LS8_7	Animal behaviour
LS8_8	Environmental and marine biology
LS8_9	Environmental toxicology at the population and ecosystems level
LS8_10	Microbial ecology and evolution
LS8_11	Species interactions (e.g. food-webs, symbiosis, parasitism, mutualism)
LS9	<b>Applied Life Sciences and Non-Medical Biotechnology:</b> Agricultural, animal, fishery, forestry and food sciences, biotechnology, genetic engineering, synthetic and chemical biology, industrial biosciences; environmental biotechnology and remediation
LS9_1	Non-medical biotechnology and genetic engineering (including transgenic organisms, recombinant proteins, biosensors, bioreactors, microbiology)
LS9_2	Synthetic biology, chemical biology and bio-engineering
LS9_3	Animal sciences (including animal husbandry, aquaculture, fisheries, animal welfare)
LS9_4	Plant sciences (including crop production, plant breeding, agroecology, soil biology)
LS9_5	Food sciences (including food technology, nutrition)
LS9_6	Forestry and biomass production (including biofuels)
LS9_7	Environmental biotechnology (including bioremediation, biodegradation)
LS9_8	Biomimetics
LS9_9	Biohazards (including biological containment, biosafety, biosecurity)

### Anexa 4.2 – Domenii științifice ERC – 2015

<b>Domain Code:</b>	SH
Subdomain Code:	SH1, SH2, SH3, SH4, SH5, SH6
Research Area Code:	SH1_1SH1_14, SH2_1SH2_11,

# DOMAIN SOCIAL SCIENCES AND HUMANITIES

SH1	Markets, Individuals and Institutions: Economics, finance and management
SH1_1	Macroeconomics; development economics; economic growth
SH1_2	International trade; international business; international management
SH1_3	Financial economics; monetary economics
SH1_4	Banking; corporate finance; international finance; accounting; auditing; insurance
SH1_5	Labour economics; human resource management
SH1_6	Econometrics; operations research
SH1_7	Behavioural economics; experimental economics; neuro-economics
SH1_8	Microeconomics; game theory
SH1_9	Marketing
SH1_10	Management; organisational behaviour; operations management
SH1_11	Industrial organisation; strategy; entrepreneurship
SH1_12	Technological change, innovation, research & development
SH1_13	Public economics; political economics; law and economics
SH1_14	History of economic thought; quantitative economic history; institutional economics; economic systems
SH2	The Social World, Diversity, Institutions and Values: Sociology, political science, law, communication, education
SH2_1	Social structure, social mobility
SH2_2	Social inequalities, social exclusion, social integration
SH2_3	Diversity and identities, gender, interethnic relations
SH2_4	Social policies, educational policies, welfare
SH2_5	Democratisation, social movements
SH2_6	Political systems, governance
SH2_7	Conflict and conflict resolution, violence
SH2_8	Legal studies, constitutions, comparative law
SH2_9	Human rights
SH2_10	International relations, global and transnational governance
SH2_11	Communication and information, networks, media
SH3	<b>Environment, Space and Population:</b> Sustainability science, demography, geography, regional studies and planning, science and technology studies
SH3_1	Sustainability sciences, environment and resources
SH3_2	Environmental and climate change, societal impact
SH3_3	Environmental and climate policy
SH3_4	Population dynamics; households, family and fertility
SH3_5	Health, ageing and society
SH3_6	Transportation and logistics, tourism
SH3_7	Spatial development, land use, regional planning
SH3_8	Urban, regional and rural studies
SH3_9	Human, social and economic geography

SH3_10	Geographic information systems, spatial data analysis
SH3_11	Social studies of science and technology
	The Human Mind and Its Complexity: Cognitive science, psychology, linguistics, philosophy of
SH4	mind, education
SH4_1	Human development and its disorders; comparative cognition
SH4_2	Personality and social cognition; emotion
SH4_3	Clinical and health psychology
SH4_4	Neuropsychology
SH4_5	Attention, perception, action, consciousness
SH4_6	Learning, memory; 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
SH4_11	Pragmatics, sociolinguistics, discourse analysis
SH4_12	Philosophy of mind, philosophy of language
SH4_13	Philosophy of science, epistemology and logic
SH4_14	Teaching and learning
SH5	Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, arts,
	philosophy
SH5_1	Classics, ancient literature and art
SH5_2	Theory and history of literature, comparative literature
SH5_3	Philology and palaeography; historical linguistics
SH5_4	Visual and performing arts, design, arts-based research
SH5_5	Music and musicology; history of music
SH5_6	History of art and architecture
SH5_7	Museums, exhibitions, conservation and restoration
SH5_8	Cultural studies, symbolic representation, religious studies
SH5_9	Social anthropology, myth, ritual, kinship
SH5_10	Cultural heritage, cultural identities and memories
SH5_11	Metaphysics, philosophical anthropology; aesthetics
SH5_12	Ethics; social and political philosophy
SH5_13	History of philosophy
SH6	The Study of the Human Past: Archaeology and history
SH6_1	Historiography, theory and methods of history
SH6_2	Archaeology, archaeometry, landscape archaeology
SH6_3	Prehistory, palaeoanthropology, palaeodemography, protohistory
SH6_4	Ancient history
SH6_5	Medieval history
SH6_6	Early modern history
SH6_7	Modern and contemporary history
SH6_8	Colonial and post-colonial history
SH6_9	Global history, transnational history, comparative history, entangled histories
SH6_10	Social and economic history
SH6_11	Gender history
SH6_12	History of ideas, intellectual history, history of science and techniques
SH6_13	Cultural history, history of collective identities and memories

### Anexa 4.2 – Domenii științifice ERC – 2015

Domain Code:	PE
Subdomain Code:	PE1, PE2, PE3, PE4, PE5, PE6, PE7, PE8, PE9, PE10
Research Area Code:	PE1_1PE1_21, PE2_1PE2_18,

# DOMAIN PHYSICAL SCIENCES AND ENGINEERING

PE1	<b>Mathematics:</b> 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	Geometry
PE1_6	Topology
PE1_7	Lie groups, Lie algebras
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	Statistics
PE1 15	Discrete mathematics and combinatorics
PE1_16	Mathematical aspects of computer science
PE1_17	Numerical analysis
PE1_18	Scientific computing and data processing
PE1_19	Control theory and optimisation
PE1_20	Application of mathematics in sciences
PE1_21	Application of mathematics in industry and society
PE2	Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics
PE2_1	Fundamental interactions and fields
PE2_2	Particle physics
PE2_3	Nuclear physics
PE2_4	Nuclear astrophysics
PE2_5	Gas and plasma physics
PE2_6	Electromagnetism
PE2_7	Atomic, molecular physics
PE2_8	Ultra-cold atoms and molecules
PE2_9	Optics, non-linear optics and nano-optics
PE2_10	Quantum optics and quantum information
PE2_11	Lasers, ultra-short lasers and laser physics
PE2_12	Acoustics
PE2_13	Relativity
PE2_14	Thermodynamics
PE2_15	Non-linear physics

PE2_16 General physics PE2_17 Metrology and measurement PE2_18 Statistical physics (gases) PE3 Condensed Matter Physics: Structure, electronic properties, fluids, nanosciences, biophysics PE3_1 Structure of solids and liquids 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, etc. PE3_5 Semiconductors and insulators: material growth, physical properties PE3_6 Macroscopic quantum phenomena: superconductivity, superfluidity, etc. PE3_7 Spintronics PE3_8 Magnetism and strongly correlated systems PE3_9 Condensed matter – beam interactions (photons, electrons, etc.) PE3_10 Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc. PE3_11 Mesoscopic physics PE3_12 Molecular electronics Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc. PE3_14 Fluid dynamics (physics) PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc. PE3_16 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
PE2_18 Statistical physics (gases)  PE3 Condensed Matter Physics: Structure, electronic properties, fluids, nanosciences, biophysics  PE3_1 Structure of solids and liquids  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, etc.  PE3_5 Semiconductors and insulators: material growth, physical properties  PE3_6 Macroscopic quantum phenomena: superconductivity, superfluidity, etc.  PE3_7 Spintronics  PE3_8 Magnetism and strongly correlated systems  PE3_9 Condensed matter – beam interactions (photons, electrons, etc.)  PE3_10 Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc.  PE3_11 Mesoscopic physics  PE3_12 Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.  PE3_14 Fluid dynamics (physics)  PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  PE3_16 Physics of biological systems  PE4_1 Physical and Analytical Chemical Sciences: Analytical chemistry, chemical theory, physical chemistry/chemical physics  PE4_1 Surface science and nanostructure  PE4_4 Surface science and nanostructures  PE4_5 Chemical physics  PE4_6 Chemical physics  PE4_7 Chemical instrumentation  PE4_8 Electrochemistry, electrodialysis, microfluidics, sensors
PE3         Condensed Matter Physics: Structure, electronic properties, fluids, nanosciences, biophysics           PE3_1         Structure of solids and liquids           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, etc.           PE3_5         Semiconductors and insulators: material growth, physical properties           PE3_6         Macroscopic quantum phenomena: superconductivity, superfluidity, etc.           PE3_7         Spintronics           PE3_8         Magnetism and strongly correlated systems           PE3_9         Condensed matter – beam interactions (photons, electrons, etc.)           PE3_10         Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc.           PE3_11         Mesoscopic physics           PE3_12         Molecular electronics           PE3_13         Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.           PE3_14         Fluid dynamics (physics)           PE3_15         Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.           PE3_16         Physical and Analytical Chemical Sciences: Analytical chemistry, chemical physics <tr< th=""></tr<>
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, etc. PE3_5 Semiconductors and insulators: material growth, physical properties PE3_6 Macroscopic quantum phenomena: superconductivity, superfluidity, etc. PE3_7 Spintronics PE3_8 Magnetism and strongly correlated systems PE3_9 Condensed matter – beam interactions (photons, electrons, etc.) PE3_10 Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc. PE3_11 Mesoscopic physics PE3_12 Molecular electronics Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc. PE3_14 Fluid dynamics (physics) PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc. PE3_16 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 physics PE4_8 Electrochemistry, electrodialysis, microfluidics, sensors
PE3_3 Transport properties of condensed matter  PE3_4 Electronic properties of materials, surfaces, interfaces, nanostructures, etc.  PE3_5 Semiconductors and insulators: material growth, physical properties  PE3_6 Macroscopic quantum phenomena: superconductivity, superfluidity, etc.  PE3_7 Spintronics  PE3_8 Magnetism and strongly correlated systems  PE3_9 Condensed matter — beam interactions (photons, electrons, etc.)  PE3_10 Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc.  PE3_11 Mesoscopic physics  PE3_12 Molecular electronics  Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.  PE3_14 Fluid dynamics (physics)  PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  PE3_16 Physical of biological systems  PE4_1 Physical and Analytical Chemical Sciences: Analytical chemistry, chemical theory, physical chemistry/chemical physics  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
PE3_4 Electronic properties of materials, surfaces, interfaces, nanostructures, etc.  PE3_5 Semiconductors and insulators: material growth, physical properties  PE3_6 Macroscopic quantum phenomena: superconductivity, superfluidity, etc.  PE3_7 Spintronics  PE3_8 Magnetism and strongly correlated systems  PE3_9 Condensed matter – beam interactions (photons, electrons, etc.)  PE3_10 Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc.  PE3_11 Mesoscopic physics  PE3_12 Molecular electronics  PE3_13 Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.  PE3_14 Fluid dynamics (physics)  PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  PE3_16 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
PE3_5 Semiconductors and insulators: material growth, physical properties  PE3_6 Macroscopic quantum phenomena: superconductivity, superfluidity, etc.  PE3_7 Spintronics  PE3_8 Magnetism and strongly correlated systems  PE3_9 Condensed matter – beam interactions (photons, electrons, etc.)  PE3_10 Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc.  PE3_11 Mesoscopic physics  PE3_12 Molecular electronics  PE3_13 Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.  PE3_14 Fluid dynamics (physics)  PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  PE3_16 Physics of biological systems  PP4_1 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
PE3_6 Macroscopic quantum phenomena: superconductivity, superfluidity, etc.  PE3_7 Spintronics  PE3_8 Magnetism and strongly correlated systems  PE3_9 Condensed matter – beam interactions (photons, electrons, etc.)  PE3_10 Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc.  PE3_11 Mesoscopic physics  PE3_12 Molecular electronics  Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.  PE3_14 Fluid dynamics (physics)  PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  PE3_16 Physica of biological systems  PE4_1 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
PE3_7 Spintronics PE3_8 Magnetism and strongly correlated systems PE3_9 Condensed matter – beam interactions (photons, electrons, etc.) PE3_10 Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc. PE3_11 Mesoscopic physics PE3_12 Molecular electronics PE3_13 Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc. PE3_14 Fluid dynamics (physics) PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc. PE3_16 Physica of biological systems PE4_1 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
PE3_8 Magnetism and strongly correlated systems PE3_9 Condensed matter – beam interactions (photons, electrons, etc.) PE3_10 Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc. PE3_11 Mesoscopic physics PE3_12 Molecular electronics PE3_13 Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc. PE3_14 Fluid dynamics (physics) PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc. PE3_16 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
PE3_9 Condensed matter – beam interactions (photons, electrons, etc.)  PE3_10 Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc.  PE3_11 Mesoscopic physics  PE3_12 Molecular electronics  Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.  PE3_13 glasses, defects, etc.  PE3_14 Fluid dynamics (physics)  PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  PE3_16 Physics of biological systems  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
PE3_11 Mesoscopic physics PE3_11 Mesoscopic physics PE3_12 Molecular electronics PE3_13 Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc. PE3_14 Fluid dynamics (physics) PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc. PE3_16 Physics of biological systems PE4_1 Physical and Analytical Chemical Sciences: Analytical chemistry, chemical theory, physical chemistry/chemical physics 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
PE3_11 Mesoscopic physics PE3_12 Molecular electronics  PE3_13 Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.  PE3_14 Fluid dynamics (physics)  PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  PE3_16 Physics of biological systems  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
PE3_12 Molecular electronics  PE3_13 Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.  PE3_14 Fluid dynamics (physics)  PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  PE3_16 Physics of biological systems  PE4_1 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
PE3_13 Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.  PE3_14 Fluid dynamics (physics)  PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  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
glasses, defects, etc.  PE3_14 Fluid dynamics (physics)  PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  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
PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.  PE3_16 Physics of biological systems  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_5 Chemical physics  PE4_6 Chemical instrumentation  PE4_8 Electrochemistry, electrodialysis, microfluidics, sensors
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 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
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_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_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_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_4 Surface science and nanostructures  PE4_5 Analytical chemistry  PE4_6 Chemical physics  PE4_7 Chemical instrumentation  PE4_8 Electrochemistry, electrodialysis, microfluidics, sensors
PE4_5 Analytical chemistry PE4_6 Chemical physics PE4_7 Chemical instrumentation PE4_8 Electrochemistry, electrodialysis, microfluidics, sensors
PE4_6 Chemical physics PE4_7 Chemical instrumentation PE4_8 Electrochemistry, electrodialysis, microfluidics, sensors
PE4_7 Chemical instrumentation PE4_8 Electrochemistry, electrodialysis, microfluidics, sensors
PE4_8 Electrochemistry, electrodialysis, microfluidics, sensors
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: Materials synthesis, structure-properties relations, functional and advanced materials, molecular architecture, organic chemistry
PE5_1 Structural properties of materials
PE5_2 Solid state materials
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, Biomaterials synthesis

PE5_8	Intelligent materials – self assembled materials
PE5_9	Coordination chemistry
PE5_10	Colloid chemistry
PE5_11	Biological chemistry
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	Molecular chemistry
PE5_19	Combinatorial chemistry
PE6	Computer Science and Informatics: Informatics and information systems, computer science,
	scientific computing, intelligent systems
PE6_1	Computer architecture, pervasive computing, ubiquitous computing
PE6_2	Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical
PE6_3	systems Software engineering, operating systems, computer languages
PE6_4	Theoretical computer science, formal methods, and quantum computing
PE6_5	Cryptology, security, privacy, quantum crypto
PE6_6	Algorithms, distributed, parallel and network algorithms, algorithmic game theory
PE6_7	Artificial intelligence, intelligent systems, multi agent systems
PE6_8	Computer graphics, computer vision, multi media, computer games
PE6_9	Human computer interaction and interface, visualisation and natural language processing
	Web and information systems, database systems, information retrieval and digital libraries, data
PE6_10	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, biocomputing, and DNA and molecular computation
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 technology, high-frequency technology
PE7_7	Signal processing
PE7_8	Networks (communication networks, sensor networks, networks of robots, etc.)
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, application
PE8	Products and Processes Engineering: Product design, process design and control, construction
	methods, civil engineering, energy systems, material engineering
PE8_1	Aerospace engineering
PE8_2	Chemical engineering, technical chemistry
PE8_3	Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment
PE8_4	Computational engineering
PE8_5	Fluid mechanics, hydraulic-, turbo-, and piston engines

PE8_6	Energy processes engineering
PE8_7	Mechanical and manufacturing engineering (shaping, mounting, joining, separation)
PE8_8	Materials engineering (metals, ceramics, polymers, composites, etc.)
PE8_9	Production technology, process engineering
PE8_10	Industrial design (product design, ergonomics, man-machine interfaces, etc.)
PE8_11	Sustainable design (for recycling, for environment, eco-design)
PE8_12	Lightweight construction, textile technology
PE8_13	Industrial bioengineering
PE9	Universe Sciences: Astro-physics/chemistry/biology; solar system; stellar, galactic and extragalactic
	astronomy, planetary systems, cosmology, space science, instrumentation
PE9_1	Solar and interplanetary physics
PE9_2	Planetary systems sciences
PE9_3	Interstellar medium
PE9_4	Formation of stars and planets
PE9_5	Astrobiology
PE9_6	Stars and stellar systems
PE9_7	The Galaxy
PE9_8	Formation and evolution of galaxies
PE9_9	Clusters of galaxies and large scale structures
PE9_10	High energy and particles astronomy – X-rays, cosmic rays, gamma rays, neutrinos
PE9_11	Relativistic astrophysics
PE9_12	Dark matter, dark energy
PE9_13	Gravitational astronomy
PE9_14	Cosmology
PE9_15	Space Sciences
PE9_16	Very large data bases: archiving, handling and analysis
PE9_17	Instrumentation - telescopes, detectors and techniques
	Earth System Science: Physical geography, geology, geophysics, atmospheric sciences,
PE10	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, volcanology
PE10_7	Oceanography (physical, chemical, biological, geological)
PE10_9	Biogeochemistry, biogeochemical cycles, environmental chemistry
PE10_10	Mineralogy, petrology, igneous petrology, metamorphic petrology
PE10_11	Geochemistry, crystal chemistry, isotope geochemistry, thermodynamics
PE10_11 PE10_12	Sedimentology, soil science, palaeontology, earth evolution
PE10_12 PE10_13	Physical geography
PE10_14	Earth observations from space/remote sensing
PE10_15	Geomagnetism, palaeomagnetism
PE10_16	Ozone, upper atmosphere, ionosphere
PE10_17	Hydrology, water and soil pollution
PE10_18	Cryosphere, dynamics of snow and ice cover, sea ice, permafrosts and ice sheets

## Anexa 4.2 – Domenii științifice ERC – 2015

<b>Domain Code:</b>	LS
Subdomain Code:	LS1, LS2, LS3, LS4, LS5, LS6, LS7, LS8, LS9
Research Area Code:	LS1_1LS1_11, LS2_1LS2_14,

### DOMAIN LIFE SCIENCES

LS1	<b>Molecular and Structural Biology and Biochemistry:</b> Molecular synthesis, modification and interaction, biochemistry, biophysics, structural biology, metabolism, signal transduction
LS1_1	Molecular interactions
LS1_2	General biochemistry and metabolism
LS1_3	DNA synthesis, modification, repair, recombination and degradation
LS1_4	RNA synthesis, processing, modification and degradation
LS1_5	Protein synthesis, modification and turnover
LS1_6	Lipid synthesis, modification and turnover
LS1_7	Carbohydrate synthesis, modification and turnover
LS1_8	Biophysics (e.g. transport mechanisms, bioenergetics, fluorescence)
LS1_9	Structural biology (crystallography and EM)
LS1_10	Structural biology (NMR)
LS1_11	Biochemistry and molecular mechanisms of signal transduction
LS2	Genetics, Genomics, Bioinformatics and Systems Biology: Molecular and population genetics, genomics, transcriptomics, proteomics, metabolomics, bioinformatics, computational biology, biostatistics, biological modelling and simulation, systems biology, genetic epidemiology
LS2_1	Genomics, comparative genomics, functional genomics
LS2_2	Transcriptomics
LS2_3	Proteomics
LS2_4	Metabolomics
LS2_5	Glycomics
LS2_6	Molecular genetics, reverse genetics and RNAi
LS2_7	Quantitative genetics
LS2_8	Epigenetics and gene regulation
LS2_9	Genetic epidemiology
LS2_10	Bioinformatics
LS2_11	Computational biology
LS2_12	Biostatistics
LS2_13	Systems biology
LS2_14	Biological systems analysis, modelling and simulation
LS3	<b>Cellular and Developmental Biology:</b> Cell biology, cell physiology, signal transduction, organogenesis, developmental genetics, pattern formation in plants and animals, stem cell biology
LS3_1	Morphology and functional imaging of cells
LS3_2	Cell biology and molecular transport mechanisms
LS3_3	Cell cycle and division
LS3_4	Apoptosis
LS3_5	Cell differentiation, physiology and dynamics
LS3_6	Organelle biology
LS3_7	Cell signalling and cellular interactions
LS3_8	Signal transduction
LS3_9	Development, developmental genetics, pattern formation and embryology in animals

LS3_10	Development, developmental genetics, pattern formation and embryology in plants
LS3_11	Cell genetics
LS3_12	Stem cell biology
	Physiology, Pathophysiology and Endocrinology: Organ physiology, pathophysiology,
LS4	endocrinology, metabolism, ageing, tumorigenesis, cardiovascular disease, metabolic syndrome
LS4_1	Organ physiology and pathophysiology
LS4_2	Comparative physiology and pathophysiology
LS4_3	Endocrinology
LS4_4	Ageing
LS4_5	Metabolism, biological basis of metabolism related disorders
LS4_6	Cancer and its biological basis
LS4_7	Cardiovascular diseases
LS4_8	Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)
T 0.	Neurosciences and Neural Disorders: Neurobiology, neuroanatomy, neurophysiology,
LS5	neurochemistry, neuropharmacology, neuroimaging, systems neuroscience, neurological and psychiatric disorders
LS5_1	Neuroanatomy and neurophysiology
LS5_2	Molecular and cellular neuroscience
LS5_3	Neurochemistry and neuropharmacology
LS5_4	Sensory systems (e.g. visual system, auditory system)
LS5_5	Mechanisms of pain
LS5_6	Developmental neurobiology
LS5_7	Cognition (e.g. learning, memory, emotions, speech)
LS5_8	Behavioural neuroscience (e.g. sleep, consciousness, handedness)
LS5_8 LS5_9	Systems neuroscience
LS5_10	Neuroimaging and computational neuroscience
LS5_10	Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)
	Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive
LS5_12 LS6	disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)  Immunity and Infection: The immune system and related disorders, infectious agents and diseases,
	prevention and treatment of infection
LS6_1	Innate immunity and inflammation
LS6_2	Adaptive immunity
LS6_3	Phagocytosis and cellular immunity
LS6_4	Immunosignalling
LS6_5	Immunological memory and tolerance
LS6_6	Immunogenetics  Minglish and
LS6_7	Microbiology
LS6_8	Virology
LS6_9	Bacteriology
LS6_10	Parasitology
LS6_11	Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)
LS6_12	Biological basis of immunity related disorders (e.g. autoimmunity)
LS6_13	Veterinary medicine and infectious diseases in animals <b>Diagnostic Tools, Therapies and Public Health:</b> Aetiology, diagnosis and treatment of disease,
LS7	public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics
LS7_1	Medical engineering and technology
LS7_2	Diagnostic tools (e.g. genetic, imaging)
LS7_3	Pharmacology, pharmacogenomics, drug discovery and design, drug therapy
LS7_4	Analgesia and Surgery

LS7_5	Toxicology
LS7_6	Gene therapy, cell therapy, regenerative medicine
LS7_7	Radiation therapy
LS7_8	Health services, health care research
LS7_9	Public health and epidemiology
LS7_10	Environment and health risks, occupational medicine
LS7_11	Medical ethics
LS8	<b>Evolutionary, Population and Environmental Biology:</b> Evolution, ecology, animal behaviour, population biology, biodiversity, biogeography, marine biology, eco-toxicology, microbial ecology
LS8_1	Ecology (theoretical and experimental; population, species and community level)
LS8_2	Population biology, population dynamics, population genetics
LS8_3	Systems evolution, biological adaptation, phylogenetics, systematics, comparative biology
LS8_4	Biodiversity, conservation biology, conservation genetics, invasion biology
LS8_5	Evolutionary biology: evolutionary ecology and genetics, co-evolution
LS8_6	Biogeography, macro-ecology
LS8_7	Animal behaviour
LS8_8	Environmental and marine biology
LS8_9	Environmental toxicology at the population and ecosystems level
LS8_10	Microbial ecology and evolution
LS8_11	Species interactions (e.g. food-webs, symbiosis, parasitism, mutualism)
LS9	<b>Applied Life Sciences and Non-Medical Biotechnology:</b> Applied plant and animal sciences; food sciences; forestry; industrial, environmental and non-medical biotechnologies, bioengineering; synthetic and chemical biology; biomimetics; bioremediation
LS9_1	Non-medical biotechnology and genetic engineering (including transgenic organisms, recombinant proteins, biosensors, bioreactors, microbiology)
LS9_2	Synthetic biology, chemical biology and bio-engineering
LS9_3	Animal sciences (including animal husbandry, aquaculture, fisheries, animal welfare)
LS9_4	Plant sciences (including crop production, plant breeding, agroecology, soil biology)
LS9_5	Food sciences (including food technology, nutrition)
LS9_6	Forestry and biomass production (including biofuels)
LS9_7	Environmental biotechnology (including bioremediation, biodegradation)
LS9_8	Biomimetics
LS9_9	Biohazards (including biological containment, biosafety, biosecurity)

## Anexa 4.3 – Domenii științifice ERC – 2016

<b>Domain Code:</b>	SH
Subdomain Code:	SH1, SH2, SH3, SH4, SH5, SH6
Research Area Code:	SH1_1SH1_14, SH2_1SH2_12,

# DOMAIN SOCIAL SCIENCES AND HUMANITIES

SH1_1         Macroeconomics; monetary economics; economic growth           SH1_2         International trade; international business; international management; spatial economics           SH1_3         Development economics, health economics, education economics           SH1_4         Financial economics; banking; corporate finance; international finance; accounting; auditing; insurance           SH1_5         Labour and demographic economics; human resource management           SH1_6         Econometrics; operations research           SH1_7         Behavioural economics; experimental economics           SH1_9         Industrial organisation; strategy; entrepreneurship           SH1_10         Management; marketing; organisational behaviour, operations management           SH1_11         Technological change, innovation, research & development           SH1_12         Agricultural economics; energy economics; environmental economics           SH1_13         Public economics; political economics; law and economics           SH1_14         Quantitative economic history; institutional economics; economic systems           SH2_13         Publical systems, Povernance           SH2_14         Quantitative economic history; institutional economics; economic systems           SH2_15         Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning           SH2_15	SH1	Individuals, Markets and Organisations: Economics, finance and management
SH1_3         Development economics, health economics, education economics           SH1_4         Financial economics; banking; corporate finance; international finance; accounting; auditing; insurance           SH1_5         Labour and demographic economics; human resource management           SH1_6         Econometrics; operations research           SH1_7         Behavioural economics; experimental economics; neuro-economics           SH1_8         Microeconomics; game theory           SH1_9         Industrial organisation; strategy; entrepreneurship           SH1_10         Management; marketing; organisation, research & development           SH1_11         Chenhological change, innovation, research & development           SH1_13         Public economics; political economics; environmental economics           SH1_14         Quantitative economic history; institutional economics; economic systems           SH2_1         Quantitative economic history; institutional economics; economic systems           SH2_1         Political systems, governance           SH2_2         Democratisation and social movements           SH2_2         Democratisation and social movements           SH2_2         Conflict resolution, war           SH2_3         Conflict resolution, splobal and transnational governance           SH2_6         Sustainability sciences, environment and resources	SH1_1	Macroeconomics; monetary economics; economic growth
SH1_4         Financial economics; banking; corporate finance; international finance; accounting; auditing; insurance           SH1_5         Labour and demographic economics; human resource management           SH1_6         Econometrics; operations research           SH1_7         Behavioural economics; experimental economics; neuro-economics           SH1_8         Microeconomics; game theory           SH1_9         Industrial organisation; strategy; entrepreneurship           SH1_10         Management; marketing; organisational behaviour; operations management           SH1_11         Technological change, innovation, research & development           SH1_11         Technological change, innovation, research & development           SH1_14         Agricultural economics; nergy economics; environmental economics           SH1_14         Quantitative economic history; institutional economics; economic systems           SH2_14         Quantitative economic history; institutional economics; economic systems           SH2_15         Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning           SH2_15         Democratisation and social movements           SH2_26         Democratisation and social movements           SH2_3         Institutions, values, Environment and resources           SH2_6         Sustainability sciences, environment and resources <td>SH1_2</td> <td>International trade; international business; international management; spatial economics</td>	SH1_2	International trade; international business; international management; spatial economics
SH1_5         Labour and demographic economics; human resource management           SH1_6         Econometrics; operations research           SH1_7         Behavioural economics; experimental economics; neuro-economics           SH1_8         Microeconomics; game theory           SH1_9         Industrial organisation; strategy; entrepreneurship           SH1_10         Management; marketing; organisational behaviour; operations management           SH1_11         Technological change, innovation, research & development           SH1_12         Agricultural economics; energy economics; environmental economics           SH1_13         Public economics; political economics; law and economics           SH1_14         Quantitative economic history; institutional economics; economic systems           SH2         Dutitical systems, governance           SH2_1         Political systems, governance           SH2_2         Democratisation and social movements           SH2_3         Conflict resolution, war	SH1_3	Development economics, health economics, education economics
SH1_6         Econometrics; operations research           SH1_7         Behavioural economics; experimental economics; neuro-economics           SH1_8         Microeconomics; game theory           SH1_9         Industrial organisation; strategy; entrepreneurship           SH1_10         Management; marketing; organisational behaviour; operations management           SH1_11         Technological change, innovation, research & development           SH1_12         Agricultural economics; energy economics; environmental economics           SH1_13         Public economics; political economics; environmental economics           SH1_14         Quantitative economic history; institutional economics; economic systems           SH2_1         Public economics; political economics; and economics           SH2_14         Quantitative economic history; institutional economics; economic systems           SH2_15         Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning           SH2_1         Political systems, governance           SH2_2         Democratisation and social movements           SH2_3         Conflict resolution, war           SH2_4         Legal studies, constitutions, human rights, comparative law           SH2_5         International relations, global and transnational governance           SH2_6         Sustainabi	SH1_4	Financial economics; banking; corporate finance; international finance; accounting; auditing; insurance
SH1_7         Behavioural economics; experimental economics; neuro-economics           SH1_8         Microeconomics; game theory           SH1_9         Industrial organisation; strategy; entrepreneurship           SH1_10         Management; marketing; organisational behaviour; operations management           SH1_11         Technological change, innovation, research & development           SH1_12         Agricultural economics; nergy economics; environmental economics           SH1_13         Public economics; political economics; law and economics           SH1_14         Quantitative economic history; institutional economics; economic systems           SH2_1         Quantitative economic history; institutional economics; economic systems           SH2_1         Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning           SH2_1         Political systems, governance           SH2_2         Democratisation and social movements           SH2_3         Conflict resolution, war           SH2_4         Legal studies, constitutions, human rights, comparative law           SH2_5         International relations, global and transnational governance           SH2_6         Sustainability sciences, environment and resources           SH2_7         Environmental and climate change, societal impact and policy           SH2_8	SH1_5	Labour and demographic economics; human resource management
SH1_8         Microeconomics; game theory           SH1_9         Industrial organisation; strategy; entrepreneurship           SH1_10         Management; marketing; organisational behaviour; operations management           SH1_11         Technological change, innovation, research & development           SH1_12         Agricultural economics; energy economics; environmental economics           SH1_13         Public economic; political economics; law and economics           SH1_14         Quantitative economic history; institutional economics; conomic systems           SH2_1         Political science, law, sustainability science, ecoraphy secure properties and social systems.           SH2_1         Political systems, governance           SH2_2         Democratisation and social movements           SH2_3         Conflict resolution, war           SH2_4         Legal studies, constitutions, human rights, comparative law           SH2_5<	SH1_6	Econometrics; operations research
SH1_9         Industrial organisation; strategy; entrepreneurship           SH1_10         Management; marketing; organisational behaviour; operations management           SH1_11         Technological change, innovation, research & development           SH1_12         Agricultural economics; energy economics; environmental economics           SH1_13         Public economics; political economics; lournous; law and economics           SH1_14         Quantitative economic history; institutional economics; economic systems           SH2_1         Quantitative economic history; institutional economics; economic systems           SH2_2         Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning           SH2_2         Democratisation and social movements           SH2_2         Democratisation and social movements           SH2_3         Conflict resolution, war           SH2_4         Legal studies, constitutions, human rights, comparative law           SH2_5         International relations, global and transnational governance           SH2_6         Sustainability sciences, environment and resources           SH2_6         Sustainability sciences, environment and resources           SH2_8         Energy, transportation and mobility           SH2_9         Urban, regional and rural studies           SH2_1         Institu	SH1_7	Behavioural economics; experimental economics; neuro-economics
SH1_10       Management; marketing; organisational behaviour; operations management         SH1_11       Technological change, innovation, research & development         SH1_12       Agricultural economics; energy economics; environmental economics         SH1_13       Public economics; political economics; law and economics         SH1_14       Quantitative economic history; institutional economics; economic systems         SH2_1       Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning         SH2_1       Political systems, governance         SH2_2       Democratisation and social movements         SH2_3       Conflict resolution, war         SH2_4       Legal studies, constitutions, human rights, comparative law         SH2_5       International relations, global and transnational governance         SH2_6       Sustainability sciences, environment and resources         SH2_7       Environmental and climate change, societal impact and policy         SH2_8       Energy, transportation and mobility         SH2_9       Urban, regional and rural studies         SH2_10       Land use and regional planning         SH2_11       Human, economic and social geography         SH2_12       GIS, spatial analysis; big data in political, geographical and legal studies         SH3_1 <t< td=""><td>SH1_8</td><td>Microeconomics; game theory</td></t<>	SH1_8	Microeconomics; game theory
SH1_11       Technological change, innovation, research & development         SH1_12       Agricultural economics; energy economics; environmental economics         SH1_13       Public economics; political economics; law and economics         SH1_14       Quantitative economic history; institutional economics; economic systems         SH2       Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning         SH2_1       Political systems, governance         SH2_2       Democratisation and social movements         SH2_3       Conflict resolution, war         SH2_4       Legal studies, constitutions, human rights, comparative law         SH2_5       International relations, global and transnational governance         SH2_6       Sustainability sciences, environment and resources         SH2_7       Environmental and climate change, societal impact and policy         SH2_8       Energy, transportation and mobility         SH2_9       Urban, regional and rural studies         SH2_10       Land use and regional planning         SH2_11       Human, economic and social geography         SH2_12       GIS, spatial analysis; big data in political, geographical and legal studies         SH3_1       Social world, Diversity, Population: Sociology, social psychology, demography, education, communication	SH1_9	Industrial organisation; strategy; entrepreneurship
SH1_12       Agricultural economics; energy economics; environmental economics         SH1_13       Public economics; political economics; law and economics         SH1_14       Quantitative economic history; institutional economics; economic systems         SH2       Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning         SH2_1       Political systems, governance         SH2_2       Democratisation and social movements         SH2_3       Conflict resolution, war         SH2_4       Legal studies, constitutions, human rights, comparative law         SH2_5       International relations, global and transnational governance         SH2_6       Sustainability sciences, environment and resources         SH2_7       Environmental and climate change, societal impact and policy         SH2_9       Urban, regional and rural studies         SH2_10       Land use and regional planning         SH2_11       Human, economic and social geography         SH2_12       GIS, spatial analysis; big data in political, geographical and legal studies         SH3       The Social World, Diversity, Population: Sociology, social psychology, demography, education, communication         SH3_1       Social integration, exclusion, prosocial behaviour         SH3_2       Actitudes and beliefs         SH3_5 <td>SH1_10</td> <td>Management; marketing; organisational behaviour; operations management</td>	SH1_10	Management; marketing; organisational behaviour; operations management
SH1_13       Public economics; political economics; law and economics         SH1_14       Quantitative economic history; institutional economics; economic systems         SH2       Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning         SH2_1       Political systems, governance         SH2_2       Democratisation and social movements         SH2_3       Conflict resolution, war         SH2_4       Legal studies, constitutions, human rights, comparative law         SH2_5       International relations, global and transnational governance         SH2_6       Sustainability sciences, environment and resources         SH2_7       Environmental and climate change, societal impact and policy         SH2_8       Energy, transportation and mobility         SH2_9       Urban, regional and rural studies         SH2_10       Land use and regional planning         SH2_11       Human, economic and social geography         SH2_12       GIS, spatial analysis; big data in political, geographical and legal studies         SH3_1       Social World, Diversity, Population: Sociology, social psychology, demography, education, communication         SH3_1       Social structure, social mobility         SH3_2       Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour	SH1_11	Technological change, innovation, research & development
SH1_14       Quantitative economic history; institutional economics; economic systems         SH2       Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning         SH2_1       Political systems, governance         SH2_2       Democratisation and social movements         SH2_3       Conflict resolution, war         SH2_4       Legal studies, constitutions, human rights, comparative law         SH2_5       International relations, global and transnational governance         SH2_6       Sustainability sciences, environment and resources         SH2_7       Environmental and climate change, societal impact and policy         SH2_8       Energy, transportation and mobility         SH2_9       Urban, regional and rural studies         SH2_10       Land use and regional planning         SH2_11       Human, economic and social geography         SH2_12       GIS, spatial analysis; big data in political, geographical and legal studies         SH3       The Social World, Diversity, Population: Sociology, social psychology, demography, education, communication         SH3_1       Social structure, social mobility         SH3_2       Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour         SH3_3       Social integration, exclusion, prosocial behaviour; classroom management     <	SH1_12	Agricultural economics; energy economics; environmental economics
Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning   SH2_1	SH1_13	Public economics; political economics; law and economics
SH2_1 Political systems, governance SH2_2 Democratisation and social movements SH2_3 Conflict resolution, war SH2_4 Legal studies, constitutions, human rights, comparative law SH2_5 International relations, global and transnational governance SH2_6 Sustainability sciences, environment and resources SH2_7 Environmental and climate change, societal impact and policy SH2_8 Energy, transportation and mobility SH2_9 Urban, regional and rural studies SH2_10 Land use and regional planning SH2_11 Human, economic and social geography SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies SH3_1 Social structure, social mobility SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour SH3_3 Social integration, exclusion, prosocial behaviour SH3_4 Attitudes and beliefs SH3_5 Social influence; power and group behaviour; classroom management SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH1_14	Quantitative economic history; institutional economics; economic systems
SH2_2       Democratisation and social movements         SH2_3       Conflict resolution, war         SH2_4       Legal studies, constitutions, human rights, comparative law         SH2_5       International relations, global and transnational governance         SH2_6       Sustainability sciences, environment and resources         SH2_7       Environmental and climate change, societal impact and policy         SH2_8       Energy, transportation and mobility         SH2_9       Urban, regional and rural studies         SH2_10       Land use and regional planning         SH2_11       Human, economic and social geography         SH2_12       GIS, spatial analysis; big data in political, geographical and legal studies         The Social World, Diversity, Population: Sociology, social psychology, demography, education, communication         SH3_1       Social structure, social mobility         SH3_2       Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour         SH3_3       Social integration, exclusion, prosocial behaviour         SH3_4       Attitudes and beliefs         SH3_5       Social influence; power and group behaviour; classroom management         SH3_6       Diversity and identities, gender, interethnic relations         SH3_7       Social policies, welfare         SH3_8	SH2	
SH2_3 Conflict resolution, war  SH2_4 Legal studies, constitutions, human rights, comparative law  SH2_5 International relations, global and transnational governance  SH2_6 Sustainability sciences, environment and resources  SH2_7 Environmental and climate change, societal impact and policy  SH2_8 Energy, transportation and mobility  SH2_9 Urban, regional and rural studies  SH2_10 Land use and regional planning  SH2_11 Human, economic and social geography  SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies  SH3_1 Social World, Diversity, Population: Sociology, social psychology, demography, education, communication  SH3_1 Social structure, social mobility  SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour  SH3_3 Social integration, exclusion, prosocial behaviour  SH3_4 Attitudes and beliefs  SH3_5 Social influence; power and group behaviour; classroom management  SH3_6 Diversity and identities, gender, interethnic relations  SH3_7 Social policies, welfare  SH3_8 Population dynamics; households, family and fertility	SH2_1	
SH2_4       Legal studies, constitutions, human rights, comparative law         SH2_5       International relations, global and transnational governance         SH2_6       Sustainability sciences, environment and resources         SH2_7       Environmental and climate change, societal impact and policy         SH2_8       Energy, transportation and mobility         SH2_9       Urban, regional and rural studies         SH2_10       Land use and regional planning         SH2_11       Human, economic and social geography         SH2_12       GIS, spatial analysis; big data in political, geographical and legal studies         SH3_1       Social World, Diversity, Population: Sociology, social psychology, demography, education, communication         SH3_1       Social structure, social mobility         SH3_2       Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour         SH3_3       Social integration, exclusion, prosocial behaviour         SH3_4       Attitudes and beliefs         SH3_5       Social influence; power and group behaviour; classroom management         SH3_6       Diversity and identities, gender, interethnic relations         SH3_7       Social policies, welfare         SH3_8       Population dynamics; households, family and fertility	SH2_2	Democratisation and social movements
SH2_5International relations, global and transnational governanceSH2_6Sustainability sciences, environment and resourcesSH2_7Environmental and climate change, societal impact and policySH2_8Energy, transportation and mobilitySH2_9Urban, regional and rural studiesSH2_10Land use and regional planningSH2_11Human, economic and social geographySH2_12GIS, spatial analysis; big data in political, geographical and legal studiesSH3The Social World, Diversity, Population: Sociology, social psychology, demography, education, communicationSH3_1Social structure, social mobilitySH3_2Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviourSH3_3Social integration, exclusion, prosocial behaviourSH3_4Attitudes and beliefsSH3_5Social influence; power and group behaviour; classroom managementSH3_6Diversity and identities, gender, interethnic relationsSH3_7Social policies, welfareSH3_8Population dynamics; households, family and fertility	SH2_3	Conflict resolution, war
SH2_6 Sustainability sciences, environment and resources  SH2_7 Environmental and climate change, societal impact and policy  SH2_8 Energy, transportation and mobility  SH2_9 Urban, regional and rural studies  SH2_10 Land use and regional planning  SH2_11 Human, economic and social geography  SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies  SH3_1 Social World, Diversity, Population: Sociology, social psychology, demography, education, communication  SH3_1 Social structure, social mobility  SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour  SH3_3 Social integration, exclusion, prosocial behaviour  SH3_4 Attitudes and beliefs  SH3_5 Social influence; power and group behaviour; classroom management  SH3_6 Diversity and identities, gender, interethnic relations  SH3_7 Social policies, welfare  SH3_8 Population dynamics; households, family and fertility	SH2_4	Legal studies, constitutions, human rights, comparative law
SH2_7 Environmental and climate change, societal impact and policy SH2_8 Energy, transportation and mobility SH2_9 Urban, regional and rural studies SH2_10 Land use and regional planning SH2_11 Human, economic and social geography SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies SH3 The Social World, Diversity, Population: Sociology, social psychology, demography, education, communication SH3_1 Social structure, social mobility SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour SH3_3 Social integration, exclusion, prosocial behaviour SH3_4 Attitudes and beliefs SH3_5 Social influence; power and group behaviour; classroom management SH3_6 Diversity and identities, gender, interethnic relations SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH2_5	International relations, global and transnational governance
SH2_8 Energy, transportation and mobility SH2_9 Urban, regional and rural studies SH2_10 Land use and regional planning SH2_11 Human, economic and social geography SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies SH3_1 Social World, Diversity, Population: Sociology, social psychology, demography, education, communication SH3_1 Social structure, social mobility SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour SH3_3 Social integration, exclusion, prosocial behaviour SH3_4 Attitudes and beliefs SH3_5 Social influence; power and group behaviour; classroom management SH3_6 Diversity and identities, gender, interethnic relations SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH2_6	Sustainability sciences, environment and resources
SH2_9 Urban, regional and rural studies SH2_10 Land use and regional planning SH2_11 Human, economic and social geography SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies  SH3_1 Social World, Diversity, Population: Sociology, social psychology, demography, education, communication SH3_1 Social structure, social mobility SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour SH3_3 Social integration, exclusion, prosocial behaviour SH3_4 Attitudes and beliefs SH3_5 Social influence; power and group behaviour; classroom management SH3_6 Diversity and identities, gender, interethnic relations SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH2_7	Environmental and climate change, societal impact and policy
SH2_10 Land use and regional planning SH2_11 Human, economic and social geography SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies  The Social World, Diversity, Population: Sociology, social psychology, demography, education, communication SH3_1 Social structure, social mobility SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour SH3_3 Social integration, exclusion, prosocial behaviour SH3_4 Attitudes and beliefs SH3_5 Social influence; power and group behaviour; classroom management SH3_6 Diversity and identities, gender, interethnic relations SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH2_8	Energy, transportation and mobility
SH2_11 Human, economic and social geography SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies  The Social World, Diversity, Population: Sociology, social psychology, demography, education, communication SH3_1 Social structure, social mobility SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour SH3_3 Social integration, exclusion, prosocial behaviour SH3_4 Attitudes and beliefs SH3_5 Social influence; power and group behaviour; classroom management SH3_6 Diversity and identities, gender, interethnic relations SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH2_9	Urban, regional and rural studies
SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies  The Social World, Diversity, Population: Sociology, social psychology, demography, education, communication  SH3_1 Social structure, social mobility  SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour  SH3_3 Social integration, exclusion, prosocial behaviour  SH3_4 Attitudes and beliefs  SH3_5 Social influence; power and group behaviour; classroom management  SH3_6 Diversity and identities, gender, interethnic relations  SH3_7 Social policies, welfare  SH3_8 Population dynamics; households, family and fertility	SH2_10	Land use and regional planning
The Social World, Diversity, Population: Sociology, social psychology, demography, education, communication  SH3_1 Social structure, social mobility  SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour  SH3_3 Social integration, exclusion, prosocial behaviour  SH3_4 Attitudes and beliefs  SH3_5 Social influence; power and group behaviour; classroom management  SH3_6 Diversity and identities, gender, interethnic relations  SH3_7 Social policies, welfare  SH3_8 Population dynamics; households, family and fertility	SH2_11	Human, economic and social geography
SH3_1 Social structure, social mobility SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour SH3_3 Social integration, exclusion, prosocial behaviour SH3_4 Attitudes and beliefs SH3_5 Social influence; power and group behaviour; classroom management SH3_6 Diversity and identities, gender, interethnic relations SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH2_12	GIS, spatial analysis; big data in political, geographical and legal studies
SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour SH3_3 Social integration, exclusion, prosocial behaviour SH3_4 Attitudes and beliefs SH3_5 Social influence; power and group behaviour; classroom management SH3_6 Diversity and identities, gender, interethnic relations SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH3	
SH3_3 Social integration, exclusion, prosocial behaviour  SH3_4 Attitudes and beliefs  SH3_5 Social influence; power and group behaviour; classroom management  SH3_6 Diversity and identities, gender, interethnic relations  SH3_7 Social policies, welfare  SH3_8 Population dynamics; households, family and fertility	SH3_1	Social structure, social mobility
SH3_4 Attitudes and beliefs SH3_5 Social influence; power and group behaviour; classroom management SH3_6 Diversity and identities, gender, interethnic relations SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH3_2	Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour
SH3_5 Social influence; power and group behaviour; classroom management SH3_6 Diversity and identities, gender, interethnic relations SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH3_3	Social integration, exclusion, prosocial behaviour
SH3_6 Diversity and identities, gender, interethnic relations SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH3_4	Attitudes and beliefs
SH3_7 Social policies, welfare SH3_8 Population dynamics; households, family and fertility	SH3_5	Social influence; power and group behaviour; classroom management
SH3_8 Population dynamics; households, family and fertility	SH3_6	Diversity and identities, gender, interethnic relations
	SH3_7	Social policies, welfare
SH3_9 Health, ageing and society	SH3_8	Population dynamics; households, family and fertility
	SH3_9	Health, ageing and society

SH3 11 Communication and information, networks, media SH3 12 Digital social research SH3 21 Science and technology studies The Human Mind and Its Complexity: Cognitive science, psychology, linguistics, philosophy of mind SH4 1 Cognitive basis of human development and education, developmental disorders; comparative cognition SH4 2 Personality and social cognition; emotion SH4 3 Clinical and health psychology SH4 3 Clinical and health psychology SH4 4 Neuropsychology SH4 5 Altention, 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 10 Language typology SH4 11 Pragmatics, sociolinguistics, discourse analysis SH4 11 Pragmatics, sociolinguistics, discourse analysis SH4 12 Philosophy of mind, philosophy of language SH4 13 Philosophy of mind philosophy of language SH5 1 Classics, ancient literature and art SH5 2 Theory and history of literature, comparative literature SH5 3 Philosophy and mind philosophy of literature, or philosopy, cultural studies, anthropology, study of the arts, philosophy SH5 3 Philosophy or mind architecture, arts-based research SH5 4 Visual and performing arts, film, design SH5 5 Music and musicology; history of music SH5 6 History of an architecture, arts-based research SH5 10 Metaphysics, philosophical anthropology; aestheics SH6 11 Editics; social and political philosophy SH5 13 Computational Modelling and Digitisation in the Cultural Sphere SH6 6 History of the Human Past: Archaeology and history SH6 6 Metaphysics, philosophy (activative proposed prop	SH3_10	Social aspects of learning, curriculum studies, educational policies
SH3 12         Digital social research           SH3 13         Science and technology studies           SH4         The Human Mind and Its Complexity: Cognitive science, psychology, linguistics, philosophy of mind           SH4 2         Personality and social cognition; emotion           SH4 3         Clinical and health psychology           SH4 4-5         Attention, perception, action, consciousness           SH4 5-6         Attention, perception, action, consciousness           SH4 6-7         Reasoning, decision-making; intelligence           SH4 7-8         Reasoning, decision-making; intelligence           SH4 8-9         Theoretical linguistics; computational linguistics           SH4 10         I anguage learning and processing (first and second languages)           SH4 11         Pragmatics, sociolinguistics, discourse analysis           SH4 12         Philosophy of mind, philosophy of language           SH4 13         Philosophy of science, epistemology, logic           SH3         Claures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5         Philosophy of philosophy           SH5         Philosophy of philosophy           SH5         Philosophy of philosophy           SH5         Philosopy and palacography; historical linguistics           SH5 <td></td> <td></td>		
SH3_13         Science and technology studies           SH4         The Human Mind and its Complexity: Cognitive science, psychology, linguistics, philosophy of mind           SH4_1         Cognitive basis of human development and education, developmental disorders; comparative cognition           SH4_2         Personality and social cognition; emotion           SH4_3         Clinical and health psychology           SH4_4         Neuropsychology           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           SH4_11         Pragmatics, sociolinguistics, discourse analysis           SH4_12         Philosophy of mind, philosophy of language           SH4_13         Philosophy of mind, philosophy of language           SH4_13         Philosophy of science, epistemology, logic           SH3_13         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of liter		
SH4         The Human Mind and Its Complexity: Cognitive science, psychology, linguistics, philosophy of mind           SH4_1         Cognitive basis of human development and education, developmental disorders; comparative cognition           SH4_2         Personality and social cognition; emotion           SH4_3         Clinical and health psychology           SH4_4         Neuropsychology           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_10         Language typology           SH4_11         Prapmatics, sociolinguistics, discourse analysis           SH4_12         Philosophy of science, epistemology, logic           CHarry         Prilosophy of science, epistemology, logic           SH5_1         Classics, ancient literature and art           SH5_2         Philosophy of science, epistemology, logic           SH5_3         Philosophy           SH5_4         Visual and performing arts, film, design           SH5_3         Philosophy and palaeography; historical linguistics           SH5_5         Misc and musicology, fistory of music           SH5_6         History of art and architectur		
SH4_1         mind           SH4_2         Cognitive basis of human development and education, developmental disorders; comparative cognition           SH4_3         Clinical and health psychology           SH4_4         Neuropsychology           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_10         Pragmatics, sociolinguistics, discourse analysis           SH4_11         Prilosophy of mind, philosophy of language           SH4_12         Philosophy of science, epistemology, logic           Cutures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Museums, exhibitions, conservation and restoration           SH5_6         History of art and architecture, arts-based research           SH5_10         Metaphysics, philosophy           SH5_11		
SH4_2         Personality and social cognition; emotion           SH4_3         Clinical and health 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_10         Language typology           SH4_11         Pragmatics, sociolinguistics, discourse analysis           SH4_12         Philosophy of mind, philosophy of language           SH4_13         Philosophy of science, epistemology, logic           Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and at           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_10         Metaphysics, philosophical authropology; asthetics           SH5_11 <td>SH4</td> <td></td>	SH4	
SH4_3         Clinical and health psychology           SH4_4         Neuropsychology           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_10         Language typology           SH4_11         Pragmatics, sociolinguistics, discourse analysis           SH4_12         Philosophy of mind, philosophy of language           SH4_13         Philosophy of science, epistemology, logic           SH5         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palacography; historical linguistics           SH5_4         Visual and performing arts, fin, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           <	SH4_1	Cognitive basis of human development and education, developmental disorders; comparative cognition
SH4_4         Neuropsychology           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_10         Theoretical linguistics; computational linguistics           SH4_11         Pragmatics, sociolinguistics, discourse analysis           SH4_12         Philosophy of mind, philosophy of language           SH4_13         Philosophy of science, epistemology, logic           SH5         Clustres and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         Music and musicology; history of music           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_10         Metaphysics, philosophical anthropology; ae	SH4_2	Personality and social cognition; emotion
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_10         Language trypology           SH4_11         Pragmatics, sociolinguistics, discourse analysis           SH4_12         Philosophy of mind, philosophy of language           SH4_13         Philosophy of science, epistemology, logic           SH5         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_9         Social anthropology, religious studies, symbolic representation           SH5_11         Ethics; socia	SH4_3	Clinical and health psychology
SH4_6         Learning, memory; cognition in ageing           SH4_7         Reasoning, decision-making; intelligence           SH4_8         Language learning and processing (first and second languages)           SH4_10         Theoretical linguistics; computational linguistics           SH4_11         Pragmatics, sociolinguistics, discourse analysis           SH4_12         Philosophy of mind, philosophy of language           SH4_13         Philosophy of science, epistemology, logic           SH5         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography, historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Museums, exhibitions, conservation and restoration           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_10         Metaphysics, philosophical anthropology, sesthetics           SH5_11         Ethics; social and political philosophy           SH5_12 </td <td>SH4_4</td> <td>Neuropsychology</td>	SH4_4	Neuropsychology
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           SH4.11         Pragmatics, sociolinguistics, discourse analysis           SH4.12         Philosophy of mind, philosophy of language           SH4.13         Philosophy of science, epistemology, logic           SH5         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5.1         Classics, ancient literature and art           SH5.2         Theory and history of literature, comparative literature           SH5.3         Philology and palaeography; historical linguistics           SH5.4         Visual and performing arts, film, design           SH5.5         Music and musicology; history of music           SH5.6         History of art and architecture, arts-based research           SH5.7         Museums, exhibitions, conservation and restoration           SH5.8         Cultural studies, cultural identities and memories, cultural heritage           SH5.9         Social anthropology, religious studies, symbolic representation           SH5.11         Ethics; social and political philosophy           SH5.12         Ethis	SH4_5	Attention, perception, action, consciousness
SH4_8         Language learning and processing (first and second languages)           SH4_9         Theoretical linguistics; computational linguistics           SH4_10         Language typology           SH4_11         Philosophy of mind, philosophy of language           SH4_12         Philosophy of science, epistemology, logic           SH5_1         Culture and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palacography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_9         Social anthropology, religious studies, symbolic representation           SH5_10         Metaphysics, philosophical anthropology; aesthetics           SH5_11         Ethics; social and political philosophy           SH5_12         History of philosophy           SH5_13         Computational Modelling and Digitisation in the Cultural Sphere           SH6_1	SH4_6	Learning, memory; cognition in ageing
SH4_9         Theoretical linguistics; computational linguistics           SH4_10         Language typology           SH4_11         Pragmatics, sociolinguistics, discourse analysis           SH4_12         Philosophy of mind, philosophy of language           SH4_13         Philosophy of science, epistemology, logic           SH5_1         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_10         Metaphysics, philosophical anthropology; religious studies, symbolic representation           SH5_11         Ethics; social and political philosophy           SH5_12         History of philosophy           SH5_13         Computational Modelling and Digitisation in the Cultural Sphere           SH6_1 <t< td=""><td>SH4_7</td><td>Reasoning, decision-making; intelligence</td></t<>	SH4_7	Reasoning, decision-making; intelligence
SH4_10         Language typology           SH4_11         Pragmatics, sociolinguistics, discourse analysis           SH4_12         Philosophy of mind, philosophy of language           SH4_13         Philosophy of science, epistemology, logic           SH5         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_9         Social anthropology, religious studies, symbolic representation           SH5_10         Metaphysics, philosophical anthropology; aesthetics           SH5_11         Ethics; social and political philosophy           SH5_12         History of philosophy           SH5_13         Computational Modelling and Digitisation in the Cultural Sphere           SH6         The Study of the Huma	SH4_8	Language learning and processing (first and second languages)
SH4_11         Pragmatics, sociolinguistics, discourse analysis           SH4_12         Philosophy of mind, philosophy of language           SH4_13         Philosophy of science, epistemology, logic           SH5         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palacography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_9         Social anthropology, religious studies, symbolic representation           SH5_10         Metaphysics, philosophical anthropology; aesthetics           SH5_11         Ethics; social and political philosophy           SH5_12         History of philosophy           SH5_13         Computational Modelling and Digitisation in the Cultural Sphere           SH6         The Study of the Human Past: Archaeology and history           SH6_1	SH4_9	Theoretical linguistics; computational linguistics
SH4_12         Philosophy of mind, philosophy of language           SH4_13         Philosophy of science, epistemology, logic           SH5         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_5         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_9         Social anthropology, religious studies, symbolic representation           SH5_10         Metaphysics, philosophical anthropology; aesthetics           SH5_11         Ethics; social and political philosophy           SH5_12         Computational Modelling and Digitisation in the Cultural Sphere           SH6         The Study of the Human Past: Archaeology and history           SH6_1         Historiography, Theory and methods in history, including the analysis of digital data           SH6_2         Classical archaeology, archaeomet	SH4_10	Language typology
SH4_13         Philosophy of science, epistemology, logic           SH5         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_9         Social anthropology, religious studies, symbolic representation           SH5_10         Metaphysics, philosophical anthropology; aesthetics           SH5_11         Ethics; social and political philosophy           SH5_12         Cibics; social and political philosophy           SH5_13         Computational Modelling and Digitisation in the Cultural Sphere           SH6         The Study of the Human Past: Archaeology and history           SH6_1         Historiography, Theory and methods in history, including the analysis of digital data           SH6_2         Classical archaeology, archaeometry,	SH4_11	Pragmatics, sociolinguistics, discourse analysis
SH5         Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, study of the arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_9         Social anthropology, religious studies, symbolic representation           SH5_10         Metaphysics, philosophical anthropology; aesthetics           SH5_11         Ethics; social and political philosophy           SH5_12         History of philosophy           SH5_13         Computational Modelling and Digitisation in the Cultural Sphere           SH6         The Study of the Human Past: Archaeology and history           SH6_1         Historiography, Theory and methods in history, including the analysis of digital data           SH6_2         Classical archaeology, instory of archaeology           SH6_3         General archaeology, archaeometry, landscape archaeo	SH4_12	Philosophy of mind, philosophy of language
SH5         arts, philosophy           SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_9         Social anthropology, religious studies, symbolic representation           SH5_10         Metaphysics, philosophical anthropology; aesthetics           SH5_11         Ethics; social and political philosophy           SH5_12         History of philosophy           SH5_13         Computational Modelling and Digitisation in the Cultural Sphere           SH6         The Study of the Human Past: Archaeology and history           SH6_1         Historiography, Theory and methods in history, including the analysis of digital data           SH6_2         Classical archaeology, history of archaeology           SH6_3         General archaeology, archaeometry, landscape archaeology           SH6_4         Prehistory, palaeoanthropology, palaeo	SH4_13	
SH5_1         Classics, ancient literature and art           SH5_2         Theory and history of literature, comparative literature           SH5_3         Philology and palaeography; historical linguistics           SH5_4         Visual and performing arts, film, design           SH5_5         Music and musicology; history of music           SH5_6         History of art and architecture, arts-based research           SH5_7         Museums, exhibitions, conservation and restoration           SH5_8         Cultural studies, cultural identities and memories, cultural heritage           SH5_9         Social anthropology, religious studies, symbolic representation           SH5_10         Metaphysics, philosophical anthropology; aesthetics           SH5_11         Ethics; social and political philosophy           SH5_12         History of philosophy           SH5_13         Computational Modelling and Digitisation in the Cultural Sphere           SH6         The Study of the Human Past: Archaeology and history           SH6_1         Historiography, Theory and methods in history, including the analysis of digital data           SH6_2         Classical archaeology, instory of archaeology           SH6_3         General archaeology, archaeometry, landscape archaeology           SH6_4         Prehistory, palaeoanthropology, palaeodemography, protohistory           SH6_5	SH5	
SH5_2       Theory and history of literature, comparative literature         SH5_3       Philology and palaeography; historical linguistics         SH5_4       Visual and performing arts, film, design         SH5_5       Music and musicology; history of music         SH5_6       History of art and architecture, arts-based research         SH5_7       Museums, exhibitions, conservation and restoration         SH5_8       Cultural studies, cultural identities and memories, cultural heritage         SH5_9       Social anthropology, religious studies, symbolic representation         SH5_10       Metaphysics, philosophical anthropology; aesthetics         SH5_11       Ethics; social and political philosophy         SH5_12       History of philosophy         SH5_13       Computational Modelling and Digitisation in the Cultural Sphere         SH6       The Study of the Human Past: Archaeology and history         SH6_1       Historiography, Theory and methods in history, including the analysis of digital data         SH6_2       Classical archaeology, archaeometry, landscape archaeology         SH6_3       General archaeology, archaeometry, landscape archaeology         SH6_4       Prehistory, palaeoanthropology, palaeodemography, protohistory         SH6_5       Ancient history         SH6_6       Medieval history         SH6_7	SH5 1	
SH5_3 Philology and palaeography; historical linguistics SH5_4 Visual and performing arts, film, design SH5_5 Music and musicology; history of music SH5_6 History of art and architecture, arts-based research SH5_7 Museums, exhibitions, conservation and restoration SH5_8 Cultural studies, cultural identities and memories, cultural heritage SH5_9 Social anthropology, religious studies, symbolic representation SH5_11 Ethics; social and political philosophy SH5_12 History of philosophy SH5_13 Computational Modelling and Digitisation in the Cultural Sphere SH6 The Study of the Human Past: Archaeology and history SH6_1 Historiography, Theory and methods in history, including the analysis of digital data SH6_2 Classical archaeology, history of archaeology SH6_3 General archaeology, archaeometry, landscape archaeology SH6_4 Prehistory, palaeoanthropology, palaeodemography, protohistory SH6_5 Ancient history SH6_6 Medieval history SH6_7 Early modern history SH6_8 Modern and contemporary history SH6_9 Colonial and post-colonial history SH6_10 Global history, transnational history, comparative history, entangled histories SH6_11 Social and economic history SH6_12 Gender history; Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought		
SH5_4       Visual and performing arts, film, design         SH5_5       Music and musicology; history of music         SH5_6       History of art and architecture, arts-based research         SH5_7       Museums, exhibitions, conservation and restoration         SH5_8       Cultural studies, cultural identities and memories, cultural heritage         SH5_9       Social anthropology, religious studies, symbolic representation         SH5_10       Metaphysics, philosophical anthropology; aesthetics         SH5_11       Ethics; social and political philosophy         SH5_12       History of philosophy         SH5_13       Computational Modelling and Digitisation in the Cultural Sphere         SH6       The Study of the Human Past: Archaeology and history         SH6_1       Historiography, Theory and methods in history, including the analysis of digital data         SH6_2       Classical archaeology, history of archaeology         SH6_3       General archaeology, archaeometry, landscape archaeology         SH6_4       Prehistory, palaeoanthropology, palaeodemography, protohistory         SH6_5       Ancient history         SH6_6       Medieval history         SH6_1       Early modern history         SH6_9       Colonial and post-colonial history         SH6_10       Global history, transnational history, comparative histo		
SH5_5Music and musicology; history of musicSH5_6History of art and architecture, arts-based researchSH5_7Museums, exhibitions, conservation and restorationSH5_8Cultural studies, cultural identities and memories, cultural heritageSH5_9Social anthropology, religious studies, symbolic representationSH5_10Metaphysics, philosophical anthropology; aestheticsSH5_11Ethics; social and political philosophySH5_12History of philosophySH5_13Computational Modelling and Digitisation in the Cultural SphereSH6The Study of the Human Past: Archaeology and historySH6_1Historiography, Theory and methods in history, including the analysis of digital dataSH6_2Classical archaeology, history of archaeologySH6_3General archaeology, archaeometry, landscape archaeologySH6_4Prehistory, palaeoanthropology, palaeodemography, protohistorySH6_5Ancient historySH6_6Medieval historySH6_8Modern and contemporary historySH6_8Modern and contemporary historySH6_9Colonial and post-colonial history,SH6_10Global history, transnational history, comparative history, entangled historiesSH6_11Social and economic historySH6_12Gender history; Cultural History; History of Collective Identities and MemoriesSH6_13History of Ideas, Intellectual History, history of economic thought		
SH5_6History of art and architecture, arts-based researchSH5_7Museums, exhibitions, conservation and restorationSH5_8Cultural studies, cultural identities and memories, cultural heritageSH5_9Social anthropology, religious studies, symbolic representationSH5_10Metaphysics, philosophical anthropology; aestheticsSH5_11Ethics; social and political philosophySH5_12History of philosophySH5_13Computational Modelling and Digitisation in the Cultural SphereSH6The Study of the Human Past: Archaeology and historySH6_1Historiography, Theory and methods in history, including the analysis of digital dataSH6_2Classical archaeology, history of archaeologySH6_3General archaeology, archaeometry, landscape archaeologySH6_4Prehistory, palaeoanthropology, palaeodemography, protohistorySH6_5Ancient historySH6_6Medieval historySH6_7Early modern historySH6_8Modern and contemporary historySH6_9Colonial and post-colonial historySH6_10Global history, transnational history, comparative history, entangled historiesSH6_11Social and economic historySH6_12Gender history; Cultural History; History of Collective Identities and MemoriesSH6_13History of Ideas, Intellectual History, history of economic thought		
SH5_7Museums, exhibitions, conservation and restorationSH5_8Cultural studies, cultural identities and memories, cultural heritageSH5_9Social anthropology, religious studies, symbolic representationSH5_10Metaphysics, philosophical anthropology; aestheticsSH5_11Ethics; social and political philosophySH5_12History of philosophySH5_13Computational Modelling and Digitisation in the Cultural SphereSH6The Study of the Human Past: Archaeology and historySH6_1Historiography, Theory and methods in history, including the analysis of digital dataSH6_2Classical archaeology, history of archaeologySH6_3General archaeology, archaeometry, landscape archaeologySH6_4Prehistory, palaeoanthropology, palaeodemography, protohistorySH6_5Ancient historySH6_6Medieval historySH6_7Early modern historySH6_8Modern and contemporary historySH6_9Colonial and post-colonial historySH6_10Global history, transnational history, comparative history, entangled historiesSH6_11Social and economic historySH6_12Gender history; Cultural History; History of Collective Identities and MemoriesSH6_13History of Ideas, Intellectual History, history of economic thought		
SH5_8 Cultural studies, cultural identities and memories, cultural heritage  SH5_9 Social anthropology, religious studies, symbolic representation  SH5_10 Metaphysics, philosophical anthropology; aesthetics  SH5_11 Ethics; social and political philosophy  SH5_12 History of philosophy  SH5_13 Computational Modelling and Digitisation in the Cultural Sphere  SH6 The Study of the Human Past: Archaeology and history  SH6_1 Historiography, Theory and methods in history, including the analysis of digital data  SH6_2 Classical archaeology, history of archaeology  SH6_3 General archaeology, archaeometry, landscape archaeology  SH6_4 Prehistory, palaeoanthropology, palaeodemography, protohistory  SH6_5 Ancient history  SH6_6 Medieval history  SH6_7 Early modern history  SH6_8 Modern and contemporary history  SH6_9 Colonial and post-colonial history  SH6_10 Global history, transnational history, comparative history, entangled histories  SH6_11 Social and economic history  SH6_12 Gender history; Cultural History; History of Collective Identities and Memories  SH6_13 History of Ideas, Intellectual History, history of economic thought		
SH5_9 Social anthropology, religious studies, symbolic representation  SH5_10 Metaphysics, philosophical anthropology; aesthetics  SH5_11 Ethics; social and political philosophy  SH5_12 History of philosophy  SH5_13 Computational Modelling and Digitisation in the Cultural Sphere  SH6 The Study of the Human Past: Archaeology and history  SH6_1 Historiography, Theory and methods in history, including the analysis of digital data  SH6_2 Classical archaeology, history of archaeology  SH6_3 General archaeology, archaeometry, landscape archaeology  SH6_4 Prehistory, palaeoanthropology, palaeodemography, protohistory  SH6_5 Ancient history  SH6_6 Medieval history  SH6_7 Early modern history  SH6_8 Modern and contemporary history  SH6_9 Colonial and post-colonial history  SH6_10 Global history, transnational history, comparative history, entangled histories  SH6_11 Social and economic history  SH6_12 Gender history; Cultural History; History of Collective Identities and Memories  SH6_13 History of Ideas, Intellectual History, history of economic thought		
SH5_11 Ethics; social and political philosophy  SH5_12 History of philosophy  SH5_13 Computational Modelling and Digitisation in the Cultural Sphere  SH6 The Study of the Human Past: Archaeology and history  SH6_1 Historiography, Theory and methods in history, including the analysis of digital data  SH6_2 Classical archaeology, history of archaeology  SH6_3 General archaeology, archaeometry, landscape archaeology  SH6_4 Prehistory, palaeoanthropology, palaeodemography, protohistory  SH6_5 Ancient history  SH6_6 Medieval history  SH6_7 Early modern history  SH6_8 Modern and contemporary history  SH6_9 Colonial and post-colonial history  SH6_10 Global history, transnational history, comparative history, entangled histories  SH6_11 Social and economic history  SH6_12 Gender history; Cultural History; History of Collective Identities and Memories  SH6_13 History of Ideas, Intellectual History, history of economic thought	SH5_9	Social anthropology, religious studies, symbolic representation
SH5_12 History of philosophy SH5_13 Computational Modelling and Digitisation in the Cultural Sphere  SH6 The Study of the Human Past: Archaeology and history SH6_1 Historiography, Theory and methods in history, including the analysis of digital data SH6_2 Classical archaeology, history of archaeology SH6_3 General archaeology, archaeometry, landscape archaeology SH6_4 Prehistory, palaeoanthropology, palaeodemography, protohistory SH6_5 Ancient history SH6_6 Medieval history SH6_7 Early modern history SH6_8 Modern and contemporary history SH6_9 Colonial and post-colonial history SH6_10 Global history, transnational history, comparative history, entangled histories SH6_11 Social and economic history SH6_12 Gender history, Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought	SH5_10	Metaphysics, philosophical anthropology; aesthetics
SH5_13 Computational Modelling and Digitisation in the Cultural Sphere  SH6 The Study of the Human Past: Archaeology and history  SH6_1 Historiography, Theory and methods in history, including the analysis of digital data  SH6_2 Classical archaeology, history of archaeology  SH6_3 General archaeology, archaeometry, landscape archaeology  SH6_4 Prehistory, palaeoanthropology, palaeodemography, protohistory  SH6_5 Ancient history  SH6_6 Medieval history  SH6_7 Early modern history  SH6_8 Modern and contemporary history  SH6_9 Colonial and post-colonial history  SH6_10 Global history, transnational history, comparative history, entangled histories  SH6_11 Social and economic history  SH6_12 Gender history; Cultural History; History of Collective Identities and Memories  SH6_13 History of Ideas, Intellectual History, history of economic thought	SH5_11	Ethics; social and political philosophy
SH6The Study of the Human Past: Archaeology and historySH6_1Historiography, Theory and methods in history, including the analysis of digital dataSH6_2Classical archaeology, history of archaeologySH6_3General archaeology, archaeometry, landscape archaeologySH6_4Prehistory, palaeoanthropology, palaeodemography, protohistorySH6_5Ancient historySH6_6Medieval historySH6_7Early modern historySH6_8Modern and contemporary historySH6_9Colonial and post-colonial historySH6_10Global history, transnational history, comparative history, entangled historiesSH6_11Social and economic historySH6_12Gender history; Cultural History; History of Collective Identities and MemoriesSH6_13History of Ideas, Intellectual History, history of economic thought	SH5_12	History of philosophy
SH6_1 Historiography, Theory and methods in history, including the analysis of digital data SH6_2 Classical archaeology, history of archaeology SH6_3 General archaeology, archaeometry, landscape archaeology SH6_4 Prehistory, palaeoanthropology, palaeodemography, protohistory SH6_5 Ancient history SH6_6 Medieval history SH6_7 Early modern history SH6_8 Modern and contemporary history SH6_9 Colonial and post-colonial history SH6_10 Global history, transnational history, comparative history, entangled histories SH6_11 Social and economic history SH6_12 Gender history; Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought	SH5_13	Computational Modelling and Digitisation in the Cultural Sphere
SH6_2 Classical archaeology, history of archaeology SH6_3 General archaeology, archaeometry, landscape archaeology SH6_4 Prehistory, palaeoanthropology, palaeodemography, protohistory SH6_5 Ancient history SH6_6 Medieval history SH6_7 Early modern history SH6_8 Modern and contemporary history SH6_9 Colonial and post-colonial history SH6_10 Global history, transnational history, comparative history, entangled histories SH6_11 Social and economic history SH6_12 Gender history; Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6	The Study of the Human Past: Archaeology and history
SH6_3 General archaeology, archaeometry, landscape archaeology SH6_4 Prehistory, palaeoanthropology, palaeodemography, protohistory SH6_5 Ancient history SH6_6 Medieval history SH6_7 Early modern history SH6_8 Modern and contemporary history SH6_9 Colonial and post-colonial history SH6_10 Global history, transnational history, comparative history, entangled histories SH6_11 Social and economic history SH6_12 Gender history; Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6_1	Historiography, Theory and methods in history, including the analysis of digital data
SH6_4 Prehistory, palaeoanthropology, palaeodemography, protohistory  SH6_5 Ancient history  SH6_6 Medieval history  SH6_7 Early modern history  SH6_8 Modern and contemporary history  SH6_9 Colonial and post-colonial history  SH6_10 Global history, transnational history, comparative history, entangled histories  SH6_11 Social and economic history  SH6_12 Gender history; Cultural History; History of Collective Identities and Memories  SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6_2	Classical archaeology, history of archaeology
SH6_5 Ancient history SH6_6 Medieval history SH6_7 Early modern history SH6_8 Modern and contemporary history SH6_9 Colonial and post-colonial history SH6_10 Global history, transnational history, comparative history, entangled histories SH6_11 Social and economic history SH6_12 Gender history; Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6_3	General archaeology, archaeometry, landscape archaeology
SH6_6 Medieval history  SH6_7 Early modern history  SH6_8 Modern and contemporary history  SH6_9 Colonial and post-colonial history  SH6_10 Global history, transnational history, comparative history, entangled histories  SH6_11 Social and economic history  SH6_12 Gender history; Cultural History; History of Collective Identities and Memories  SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6_4	Prehistory, palaeoanthropology, palaeodemography, protohistory
SH6_7 Early modern history SH6_8 Modern and contemporary history SH6_9 Colonial and post-colonial history SH6_10 Global history, transnational history, comparative history, entangled histories SH6_11 Social and economic history SH6_12 Gender history; Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6_5	Ancient history
SH6_8 Modern and contemporary history SH6_9 Colonial and post-colonial history SH6_10 Global history, transnational history, comparative history, entangled histories SH6_11 Social and economic history SH6_12 Gender history; Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6_6	Medieval history
SH6_9 Colonial and post-colonial history SH6_10 Global history, transnational history, comparative history, entangled histories SH6_11 Social and economic history SH6_12 Gender history; Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6_7	Early modern history
SH6_10 Global history, transnational history, comparative history, entangled histories SH6_11 Social and economic history SH6_12 Gender history; Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6_8	Modern and contemporary history
<ul> <li>SH6_11 Social and economic history</li> <li>SH6_12 Gender history; Cultural History; History of Collective Identities and Memories</li> <li>SH6_13 History of Ideas, Intellectual History, history of economic thought</li> </ul>	SH6_9	Colonial and post-colonial history
SH6_12 Gender history; Cultural History; History of Collective Identities and Memories SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6_10	Global history, transnational history, comparative history, entangled histories
SH6_13 History of Ideas, Intellectual History, history of economic thought	SH6_11	Social and economic history
	SH6_12	Gender history; Cultural History; History of Collective Identities and Memories
SH6_14 History of Science, Medicine and Technologies	SH6_13	History of Ideas, Intellectual History, history of economic thought
	SH6_14	History of Science, Medicine and Technologies

## Anexa 4.3 – Domenii științifice ERC – 2016

<b>Domain Code:</b>	PE
Subdomain Code:	PE1, PE2, PE3, PE4, PE5, PE6, PE7, PE8, PE9, PE10
Research Area Code:	PE1_1PE1_21, PE2_1PE2_18,

# DOMAIN PHYSICAL SCIENCES AND ENGINEERING

PEI_1         Logic and foundations           PEI_2         Algebra           PEI_3         Number theory           PEI_4         Algebraic and complex geometry           PEI_5         Geometry           PEI_6         Topology           PEI_7         Lie groups, Lie algebras           PEI_8         Analysis           PEI_9         Operator algebras and functional analysis           PEI_10         Obe and dynamical systems           PEI_11         Theoretical aspects of partial differential equations           PEI_12         Mathematical physics           PEI_13         Probability           PEI_14         Statistics           PEI_15         Discrete mathematics and combinatorics           PEI_15         Discrete mathematics and combinatorics           PEI_16         Mathematical aspects of computer science           PEI_17         Numerical analysis           PEI_18         Scientific computing and data processing           PEI_19         Control theory and optimisation           PEI_19         Control theory and optimisation           PEI_19         Application of mathematics in sciences           PEI_21         Application of mathematics in industry and society           PE2_21         Pu	PE1	<b>Mathematics:</b> All areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics
PEI_3         Number theory           PEI_4         Algebraic and complex geometry           PEI_5         Geometry           PEI_6         Topology           PEI_7         Lie groups, Lie algebras           PEI_8         Analysis           PEI_9         Operator algebras and functional analysis           PEI_10         ODE and dynamical systems           PEI_11         Theoretical aspects of partial differential equations           PEI_12         Mathematical physics           PEI_13         Probability           PEI_14         Statistics           PEI_15         Discrete mathematics and combinatorics           PEI_14         Statistics           PEI_15         Discrete mathematics and combinatorics           PEI_16         Mathematical aspects of computer science           PEI_17         Numerical analysis           PEI_18         Scientific computing and data processing           PEI_19         Control theory and optimisation           PEI_19         Opplication of mathematics in sciences           PEI_19         Application of mathematics in sciences           PEI_21         Application of mathematics in industry and society           PE2_1         Pundamental Constituents of Matter: Particle, nuclear, plasma, atomic, mo	PE1_1	Logic and foundations
PEI_4         Algebraic and complex geometry           PEI_5         Geometry           PEI_6         Topology           PEI_7         Lie groups, Lie algebras           PEI_8         Analysis           PEI_9         Operator algebras and functional analysis           PEI_10         ODE and dynamical systems           PEI_11         Theoretical aspects of partial differential equations           PEI_12         Mathematical spects of partial differential equations           PEI_13         Probability           PEI_14         Statistics           PEI_15         Discrete mathematics and combinatorics           PEI_16         Mathematical aspects of computer science           PEI_17         Numerical analysis           PEI_18         Scientific computing and data processing           PEI_19         Control theory and optimisation           PEI_210         Application of mathematics in sciences           PEI_21         Application of mathematics in sciences           PEI_21         Pundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics           PE2_1         Pundamental interactions and fields           PE2_2         Particle physics           PE2_3         Nuclear astrophysics <t< td=""><td>PE1_2</td><td>Algebra</td></t<>	PE1_2	Algebra
PE1_5         Geometry           PE1_6         Topology           PE1_7         Lie groups, Lie algebras           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         Statistics           PE1_15         Discrete mathematics and combinatorics           PE1_16         Mathematical aspects of computer science           PE1_17         Numerical analysis           PE1_18         Scientific computing and data processing           PE1_19         Control theory and optimisation           PE1_19         Application of mathematics in sciences           PE1_10         Application of mathematics in sciences           PE1_21         Application of mathematics in industry and society           PE2         Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics           PE2_1         Pundamental interactions and fields           PE2_2         Particle physics           PE2_3         Nuclear physics           PE2_4	PE1_3	Number theory
PE1_6         Topology           PE1_7         Lie groups, Lie algebras           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         Statistics           PE1_15         Discrete mathematics and combinatorics           PE1_15         Mathematical aspects of computer science           PE1_17         Numerical analysis           PE1_18         Scientific computing and data processing           PE1_19         Control theory and optimisation           PE1_19         Application of mathematics in sciences           PE1_20         Application of mathematics in industry and society           PE2         Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics           PE2_1         Particle physics           PE2_2         Particle physics           PE2_3         Nuclear physics           PE2_4         Nuclear physics           PE2_5         Gas and plasma physics           PE2_6         Electromagnetism	PE1_4	Algebraic and complex geometry
PE1_7         Lie groups, Lie algebras           PE1_8         Analysis           PE1_9         Operaor 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         Statistics           PE1_15         Discrete mathematics and combinatorics           PE1_16         Mathematical aspects of computer science           PE1_17         Numerical analysis           PE1_18         Scientific computing and data processing           PE1_19         Control theory and optimisation           PE1_20         Application of mathematics in sciences           PE1_21         Application of mathematics in sciences           PE2_1         Application of mathematics in industry and society           PE2_2         Application of mathematics in industry and society           PE2_1         Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics           PE2_1         Fundamental interactions and fields           PE2_2         Particle physics           PE2_3         Nuclear astrophysics           PE2_4         Nuclear astrophys	PE1_5	Geometry
PEI_8         Analysis           PEI_9         Operator algebras and functional analysis           PEI_10         ODE and dynamical systems           PEI_11         Theoretical aspects of partial differential equations           PEI_12         Mathematical physics           PEI_13         Probability           PEI_14         Statistics           PEI_15         Discrete mathematics and combinatorics           PEI_16         Mathematical aspects of computer science           PEI_17         Numerical analysis           PEI_18         Scientific computing and data processing           PEI_19         Control theory and optimisation           PEI_20         Application of mathematics in sciences           PEI_21         Application of mathematics in industry and society           PE2         Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics           PE2_1         Prundamental interactions and fields           PE2_2         Particle physics           PE2_3         Nuclear physics           PE2_4         Nuclear physics           PE2_5         Gas and plasma physics           PE2_6         Electromagnetism           PE2_7         Atomic, molecular physics           PE2_8	PE1_6	Topology
PEI_9         Operator algebras and functional analysis           PEI_10         ODE and dynamical systems           PEI_11         Theoretical aspects of partial differential equations           PEI_12         Mathematical physics           PEI_13         Probability           PEI_14         Statistics           PEI_15         Discrete mathematics and combinatorics           PEI_16         Mathematical aspects of computer science           PEI_17         Numerical analysis           PEI_18         Scientific computing and data processing           PEI_19         Control theory and optimisation           PEI_20         Application of mathematics in sciences           PEI_21         Application of mathematics in industry and society           PE2         Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics           PE2_1         Fundamental interactions and fields           PE2_2         Particle physics           PE2_3         Nuclear physics           PE2_4         Nuclear astrophysics           PE2_5         Gas and plasma physics           PE2_6         Electromagnetism           PE2_7         Atomic, molecular physics           PE2_8         Ultra-cold atoms and molecules	PE1_7	Lie groups, Lie algebras
PEI_10 ODE and dynamical systems PEI_11 Theoretical aspects of partial differential equations PEI_12 Mathematical physics PEI_13 Probability PEI_14 Statistics PEI_15 Discrete mathematics and combinatorics PEI_16 Mathematical aspects of computer science PEI_17 Numerical analysis PEI_18 Scientific computing and data processing PEI_19 Control theory and optimisation PEI_20 Application of mathematics in sciences PEI_21 Application of mathematics in industry and society PE2 Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics PE2_1 Fundamental interactions and fields PE2_2 Particle physics PE2_3 Nuclear physics PE2_4 Nuclear astrophysics PE2_5 Gas and plasma physics PE2_6 Electromagnetism PE2_7 Atomic, molecular physics PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE1_8	Analysis
PE1_11         Theoretical aspects of partial differential equations           PE1_12         Mathematical physics           PE1_13         Probability           PE1_14         Statistics           PE1_15         Discrete mathematics and combinatorics           PE1_16         Mathematical aspects of computer science           PE1_17         Numerical analysis           PE1_18         Scientific computing and data processing           PE1_19         Control theory and optimisation           PE1_20         Application of mathematics in sciences           PE1_21         Application of mathematics in industry and society           PE2         Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics           PE2_1         Fundamental interactions and fields           PE2_2         Particle physics           PE2_3         Nuclear astrophysics           PE2_4         Nuclear astrophysics           PE2_5         Gas and plasma physics           PE2_6         Electromagnetism           PE2_7         Atomic, molecular physics           PE2_8         Ultra-cold atoms and molecules           PE2_10         Quantum optics and quantum information           PE2_11         Lasers, ultra-short lasers and laser physics	PE1_9	Operator algebras and functional analysis
PE1_12       Mathematical physics         PE1_13       Probability         PE1_14       Statistics         PE1_15       Discrete mathematics and combinatorics         PE1_16       Mathematical aspects of computer science         PE1_17       Numerical analysis         PE1_18       Scientific computing and data processing         PE1_19       Control theory and optimisation         PE1_20       Application of mathematics in sciences         PE1_21       Application of mathematics in sciences         PE2_1       Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics         PE2_1       Fundamental interactions and fields         PE2_2       Particle physics         PE2_3       Nuclear physics         PE2_4       Nuclear astrophysics         PE2_5       Gas and plasma physics         PE2_6       Electromagnetism         PE2_7       Atomic, molecular physics         PE2_8       Ultra-cold atoms and molecules         PE2_9       Optics, non-linear optics and nano-optics         PE2_10       Quantum optics and quantum information         PE2_11       Lasers, ultra-short lasers and laser physics         PE2_12       Acoustics         PE2_13	PE1_10	ODE and dynamical systems
PE1_13 Probability PE1_14 Statistics PE1_15 Discrete mathematics and combinatorics PE1_16 Mathematical aspects of computer science PE1_17 Numerical analysis PE1_18 Scientific computing and data processing PE1_19 Control theory and optimisation PE1_20 Application of mathematics in sciences PE1_21 Application of mathematics in industry and society PE2_2 Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics PE2_1 Fundamental interactions and fields PE2_2 Particle physics PE2_3 Nuclear physics PE2_4 Nuclear astrophysics PE2_5 Gas and plasma physics PE2_5 Gas and plasma physics PE2_6 Electromagnetism PE2_7 Atomic, molecular physics PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_13 Relativity PE2_13 Relativity PE2_14 Thermodynamics	PE1_11	Theoretical aspects of partial differential equations
PE1_14 Statistics PE1_15 Discrete mathematics and combinatorics PE1_16 Mathematical aspects of computer science PE1_17 Numerical analysis PE1_18 Scientific computing and data processing PE1_19 Control theory and optimisation PE1_20 Application of mathematics in sciences PE1_21 Application of mathematics in industry and society PE2_1 Application of mathematics in industry and society PE2_1 Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics PE2_1 Pindamental interactions and fields PE2_2 Particle physics PE2_3 Nuclear physics PE2_4 Nuclear astrophysics PE2_5 Gas and plasma physics PE2_5 Gas and plasma physics PE2_6 Electromagnetism PE2_7 Atomic, molecular physics PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE1_12	Mathematical physics
PEI_15         Discrete mathematics and combinatorics           PEI_16         Mathematical aspects of computer science           PEI_17         Numerical analysis           PEI_18         Scientific computing and data processing           PEI_19         Control theory and optimisation           PEI_20         Application of mathematics in sciences           PEI_21         Application of mathematics in industry and society           PE2         Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics           PE2_1         Fundamental interactions and fields           PE2_2         Particle physics           PE2_3         Nuclear physics           PE2_4         Nuclear astrophysics           PE2_5         Gas and plasma physics           PE2_6         Electromagnetism           PE2_7         Atomic, molecular physics           PE2_8         Ultra-cold atoms and molecules           PE2_9         Optics, non-linear optics and nano-optics           PE2_10         Quantum optics and quantum information           PE2_11         Lasers, ultra-short lasers and laser physics           PE2_12         Acoustics           PE2_13         Relativity           PE2_14         Thermodynamics	PE1_13	Probability
PE1_16 Mathematical aspects of computer science PE1_17 Numerical analysis PE1_18 Scientific computing and data processing PE1_19 Control theory and optimisation PE1_20 Application of mathematics in sciences PE1_21 Application of mathematics in industry and society  PE2 Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics PE2_1 Fundamental interactions and fields PE2_2 Particle physics PE2_3 Nuclear physics PE2_4 Nuclear astrophysics PE2_5 Gas and plasma physics PE2_6 Electromagnetism PE2_7 Atomic, molecular physics PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_13 Relativity PE2_14 Thermodynamics	PE1_14	Statistics
PE1_17 Numerical analysis PE1_18 Scientific computing and data processing PE1_19 Control theory and optimisation PE1_20 Application of mathematics in sciences PE1_21 Application of mathematics in industry and society  PE2 Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics PE2_1 Fundamental interactions and fields PE2_2 Particle physics PE2_3 Nuclear physics PE2_4 Nuclear astrophysics PE2_5 Gas and plasma physics PE2_6 Electromagnetism PE2_7 Atomic, molecular physics PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE1_15	Discrete mathematics and combinatorics
PE1_18       Scientific computing and data processing         PE1_19       Control theory and optimisation         PE1_20       Application of mathematics in sciences         PE1_21       Application of mathematics in industry and society         PE2_2       Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics         PE2_1       Fundamental interactions and fields         PE2_2       Particle physics         PE2_3       Nuclear physics         PE2_4       Nuclear astrophysics         PE2_5       Gas and plasma physics         PE2_6       Electromagnetism         PE2_7       Atomic, molecular physics         PE2_8       Ultra-cold atoms and molecules         PE2_9       Optics, non-linear optics and nano-optics         PE2_10       Quantum optics and quantum information         PE2_11       Lasers, ultra-short lasers and laser physics         PE2_12       Acoustics         PE2_13       Relativity         PE2_14       Thermodynamics	PE1_16	Mathematical aspects of computer science
PE1_19       Control theory and optimisation         PE1_20       Application of mathematics in sciences         PE1_21       Application of mathematics in industry and society         PE2_1       Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics         PE2_1       Fundamental interactions and fields         PE2_2       Particle physics         PE2_3       Nuclear physics         PE2_4       Nuclear astrophysics         PE2_5       Gas and plasma physics         PE2_5       Electromagnetism         PE2_7       Atomic, molecular physics         PE2_8       Ultra-cold atoms and molecules         PE2_9       Optics, non-linear optics and nano-optics         PE2_10       Quantum optics and quantum information         PE2_11       Lasers, ultra-short lasers and laser physics         PE2_12       Acoustics         PE2_13       Relativity         PE2_14       Thermodynamics	PE1_17	Numerical analysis
PE1_20Application of mathematics in sciencesPE1_21Application of mathematics in industry and societyPE2Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physicsPE2_1Fundamental interactions and fieldsPE2_2Particle physicsPE2_3Nuclear physicsPE2_4Nuclear astrophysicsPE2_5Gas and plasma physicsPE2_6ElectromagnetismPE2_7Atomic, molecular physicsPE2_8Ultra-cold atoms and moleculesPE2_9Optics, non-linear optics and nano-opticsPE2_10Quantum optics and quantum informationPE2_11Lasers, ultra-short lasers and laser physicsPE2_12AcousticsPE2_13RelativityPE2_14Thermodynamics	PE1_18	Scientific computing and data processing
PE1_21 Application of mathematics in industry and society  PE2 Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics  PE2_1 Fundamental interactions and fields  PE2_2 Particle physics  PE2_3 Nuclear physics  PE2_4 Nuclear astrophysics  PE2_5 Gas and plasma physics  PE2_6 Electromagnetism  PE2_7 Atomic, molecular physics  PE2_8 Ultra-cold atoms and molecules  PE2_9 Optics, non-linear optics and nano-optics  PE2_10 Quantum optics and quantum information  PE2_11 Lasers, ultra-short lasers and laser physics  PE2_12 Acoustics  PE2_13 Relativity  PE2_14 Thermodynamics	PE1_19	Control theory and optimisation
PE2Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physicsPE2_1Fundamental interactions and fieldsPE2_2Particle physicsPE2_3Nuclear physicsPE2_4Nuclear astrophysicsPE2_5Gas and plasma physicsPE2_6ElectromagnetismPE2_7Atomic, molecular physicsPE2_8Ultra-cold atoms and moleculesPE2_9Optics, non-linear optics and nano-opticsPE2_10Quantum optics and quantum informationPE2_11Lasers, ultra-short lasers and laser physicsPE2_12AcousticsPE2_13RelativityPE2_14Thermodynamics	PE1_20	Application of mathematics in sciences
PE2_1 Fundamental interactions and fields  PE2_2 Particle physics  PE2_3 Nuclear physics  PE2_4 Nuclear astrophysics  PE2_5 Gas and plasma physics  PE2_6 Electromagnetism  PE2_7 Atomic, molecular physics  PE2_8 Ultra-cold atoms and molecules  PE2_9 Optics, non-linear optics and nano-optics  PE2_10 Quantum optics and quantum information  PE2_11 Lasers, ultra-short lasers and laser physics  PE2_12 Acoustics  PE2_13 Relativity  PE2_14 Thermodynamics	PE1_21	Application of mathematics in industry and society
PE2_2 Particle physics PE2_3 Nuclear physics PE2_4 Nuclear astrophysics PE2_5 Gas and plasma physics PE2_6 Electromagnetism PE2_7 Atomic, molecular physics PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE2	
PE2_3 Nuclear physics PE2_4 Nuclear astrophysics PE2_5 Gas and plasma physics PE2_6 Electromagnetism PE2_7 Atomic, molecular physics PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE2_1	Fundamental interactions and fields
PE2_4 Nuclear astrophysics PE2_5 Gas and plasma physics PE2_6 Electromagnetism PE2_7 Atomic, molecular physics PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE2_2	Particle physics
PE2_5 Gas and plasma physics  PE2_6 Electromagnetism  PE2_7 Atomic, molecular physics  PE2_8 Ultra-cold atoms and molecules  PE2_9 Optics, non-linear optics and nano-optics  PE2_10 Quantum optics and quantum information  PE2_11 Lasers, ultra-short lasers and laser physics  PE2_12 Acoustics  PE2_13 Relativity  PE2_14 Thermodynamics	PE2_3	Nuclear physics
PE2_6 Electromagnetism PE2_7 Atomic, molecular physics PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE2_4	Nuclear astrophysics
PE2_7 Atomic, molecular physics PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE2_5	Gas and plasma physics
PE2_8 Ultra-cold atoms and molecules PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE2_6	Electromagnetism
PE2_9 Optics, non-linear optics and nano-optics PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE2_7	Atomic, molecular physics
PE2_10 Quantum optics and quantum information PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE2_8	Ultra-cold atoms and molecules
PE2_11 Lasers, ultra-short lasers and laser physics PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE2_9	Optics, non-linear optics and nano-optics
PE2_12 Acoustics PE2_13 Relativity PE2_14 Thermodynamics	PE2_10	Quantum optics and quantum information
PE2_13 Relativity PE2_14 Thermodynamics	PE2_11	Lasers, ultra-short lasers and laser physics
PE2_14 Thermodynamics	PE2_12	Acoustics
	PE2_13	Relativity
PE2_15 Non-linear physics	PE2_14	Thermodynamics
	PE2_15	Non-linear physics

PE2_16	General physics
PE2_17	Metrology and measurement
PE2_18	Statistical physics (gases)
PE3	Condensed Matter Physics: Structure, electronic properties, fluids, nanosciences, biophysics
PE3_1	Structure of solids and liquids
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, etc.
PE3_5	Semiconductors and insulators: material growth, physical properties
PE3_6	Macroscopic quantum phenomena: superconductivity, superfluidity, etc.
PE3_7	Spintronics
PE3_8	Magnetism and strongly correlated systems
PE3_9	Condensed matter – beam interactions (photons, electrons, etc.)
PE3_10	Nanophysics: nanoelectronics, nanophotonics, nanomagnetism, nanoelectromechanics, etc.
PE3_11	Mesoscopic physics
PE3_12	Molecular electronics
PE3_13	Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), glasses, defects, etc.
PE3_14	Fluid dynamics (physics)
PE3_15	Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.
PE3_16	Physics of biological systems
PE4	Physical and Analytical Chemical Sciences: Analytical chemistry, chemical theory, physical
PE4_1	chemistry/chemical physics 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: Materials synthesis, structure-properties relations, functional
	and advanced materials, molecular architecture, organic chemistry
PE5_1	Structural properties of materials
PE5_2	Solid state materials
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, biomaterials synthesis

PE5 9 Coordination chemistry PE5 10 Coloid chemistry PE5 11 Biological chemistry 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 Molecular chemistry PE5 19 Organic chemistry PE6 10 Computer Systems of the computing and information systems, computer science, scientific computing, intelligent systems PE6 10 Computer and informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6 1 Computer and informatics: Informatics and information systems, computer science, scientific computing, intelligent systems, sensor networks, embedded systems, cyber-physical systems PE6 1 Computer and information systems, sensor networks, embedded systems, cyber-physical systems PE6 3 Oftware engineering, operating systems, computer languages PE6 4 Theoretical computer science, formal methods, and quantum computing PE6 5 Cryptology, security, privacy, quantum crypto PE6 6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6 7 Artificial intelligence, intelligent systems, multi agent systems PE6 8 Computer graphics, computer vision, multi media, computer game PE6 9 Human computer interaction and interface, visualisation and natural language processing PE6 10 Web and information systems, database systems, information retrieval and digital libraries, data fusion PE6 11 Image, video) PE6 12 Scientific computing, simulation and modelling tools PE6 12 Scientific computing, simulation and modelling tools PE6 13 Image, video) PE7 1 Control engineering PE7 2 Rectrical engineering; power components and/or systems PE7 3 Signal processing PE7 3 Signal processing PE7 4 (Micro and hanno) electronic, optoelectronic and photonic components PE7 4 (Micro and hanno) electronic, optoelectronic and photonic components PE7 9 Man-machine-i	PE5_8	Intelligent materials – self assembled materials
PE5_10 Colloid chemistry PE5_11 Biological chemistry PE5_13 Homogeneous catalysis PE5_14 Macromolecular chemistry PE5_15 Macromolecular chemistry PE5_16 Supramolecular chemistry PE5_17 Organic chemistry PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE5_19 Combinatorial chemistry PE5_19 Combinatorial chemistry PE5_19 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_1 Computer scheinter, pervasive computing, ubiquitous computing PE6_1 Computer systems, parallel/distributed systems, sensor networks, embedded systems, eyber-physical systems PE6_1 Computer systems, parallel/distributed systems, sensor networks, embedded systems, eyber-physical systems PE6_1 Theoretical computer science, formal methods, and quantum computing PE6_2 Cyppology, security, privacy, quantum crypto PE6_3 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_4 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_3 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database systems, information retrieval and digital libraries, data fusion PE6_11 Sioniformatics, biocomputing, and DNA and molecular computation PE6_12 Scientific computing, simulation and modelling tools PE6_13 Bioinformatics, biocomputing, and DNA and molecular computation PE7_2 Signal processing PE7_3 Micro and nano) systems engineering. PE7_4 (Micro and nano) systems engineering. PE7_5 (Micro and nano) systems engineering. PE7_6 (Communication technology, high-frequency technology PE7_7 Signal processing PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_11 Conponents and systems for applications (in e.g. medicine, biology, environment) PE7_12 Electrical energy production, distribution, application PE7_12 Electrical energy production, distribution, application PE7_12 Electrical		-
PES 11 Biological chemistry PES 12 Chemistry of condensed matter PES 13 Monogeneous catalysis PES 14 Macromolecular chemistry PES 15 Polymer chemistry PES 16 Symmolecular chemistry PES 17 Organic chemistry PES 17 Organic chemistry PES 18 Molecular chemistry PES 19 Combinatorial chemistry PES 19 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PEG 10 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PEG 1 Computer architecture, pervasive computing, ubiquitous computing PEG 2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PEG 3 Software engineering, operating systems, computer languages PEG 4 Theoretical computer science, formal methods, and quantum computing PEG 5 Cypology, security, privacy, quantum crypto PEG 5 Cypology, security, privacy, quantum crypto PEG 6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PEG 7 Artificial intelligence, intelligent systems, multi agent systems PEG 8 Computer graphics, computer vision, multi media, computer games PEG 9 Human computer interaction and interface, visualisation and natural language processing PEG 11 Good Pumper interaction and interface, visualisation and natural language processing (e.g. speech, image, video) PEG 12 Scientific computing, simulation and modelling tools PEG 13 Bioinformatics, biocomputing, and DNA and molecular computation PEG 13 Bioinformatics, biocomputing, and DNA and molecular computation PEG 14 (Micro and nano) systems engineering PET 2 Electrical engineering power components and/or systems PET 3 Signal processing PET 4 (Micro and nano) systems engineering PET 5 (Micro and nano) systems engineering PET 7 (Signal processing PET 8 (Accomputing and modelling PET 10 (Components and systems for applications (in e.g. medicine, biology, environment) PET 12 Electrical energy production, distribution,		
PE5_12         Chemistry of condensed matter           PE5_13         Homogeneous catalysis           PE5_15         Polymer chemistry           PE5_15         Polymer chemistry           PE5_17         Organic chemistry           PE5_18         Molecular chemistry           PE5_19         Combinatorial chemistry           PE5_19         Combinatorial chemistry           PE6_10         Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems           PE6_11         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_2         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_3         Software engineering, operating systems, computer languages           PE6_4         Theoretical computer science, formal methods, and quantum computing           PE6_5         Cryptology, security, privacy, quantum crypto           PE6_6         Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer graphics, computer vision, multi media, computer games           PE6_9         Human computer interaction and interface, visualisation and natural language process		•
PES_13 Homogeneous catalysis PES_15 Macromolecular chemistry PES_16 Supramolecular chemistry PES_17 Organic chemistry PES_18 Molecular chemistry PES_19 Combinatorial chemistry PES_19 Combinatorial chemistry PES_19 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PES_19 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PES_19 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PES_19 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PES_20 Software engineering, operating systems, computer languages PES_3 Software engineering, operating systems, computer languages PES_3 Cryptology, security, privacy, quantum crypto PES_4 Theoretical computer science, formal methods, and quantum computing PES_4 Theoretical computer science, formal methods, and quantum computing PES_4 Theoretical computer science, formal methods, and quantum computing PES_5 Cryptology, security, privacy, quantum crypto PES_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PES_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PES_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PES_6 Human computer interaction and interface, visualisation and natural language processing PES_6 Human computer interaction and interface, visualisations using signal processing (e.g. speech, image, video) PES_6 Human computing, simulation and modelling tools PES_6 Securitic computing, simulation and modelling tools PES_6 Control engineering: Pew Control engineering and modelling PES_7 Systems and Communication networks and or systems PES_7 Simulation engineering and modelling PES_7 Signal processing PES_7 Signal processing PES_7 Control engineering and modelling PES_7 Signal processing PES_8 Networks (c		
PE5_14 Macromolecular chemistry PE5_15 Polymer chemistry PE5_17 Organic chemistry PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE5_19 Computer science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_1 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Computer architecture, pervasive computing, ubiquitous computing PE6_3 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cyptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database systems, information retrieval and digital libraries, data fusion Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video) PE6_11 Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video) PE6_12 Scientific computing, and DNA and molecular computation PE7_10 Control engineering PE7_11 Control engineering: power components and/or systems PE7_2 Signal processing PE7_3 Simulation engineering and modelling PE7_4 (Micro and nano) systems engineering: Electrical, electronic, communication, optical and systems engineering PE7_10 Robotics PE7_11 Components and systems for applications (in e.g. medicine, biology, environment) PE7_12 Signal processing PE7_13 Name and Processes Engineering: Product design, process design and con		
PE5_15 Polymer chemistry PE5_16 Supramolecular chemistry PE5_17 Organic chemistry PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE5_19 Combinatorial chemistry PE5_19 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_10 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database systems, information retrieval and digital libraries, data fusion Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video) PE6_11 Scientific computing, simulation and modelling tools PE6_13 Solinformatics, biocomputing, and DNA and molecular computation PE7_12 Systems and Communication Engineering: Electrical, electronic, communication, optical and systems engineering PE7_14 (Micro and nano) systems engineering PE7_15 (Micro and nano) electronic, optoelectronic and photonic components PE7_16 (Micro and nano) systems engineering PE7_17 (Micro and nano) electronic, optoelectronic and photonic components PE7_19 (Micro and nano) electronic, optoelectronic and photonic components PE7_19 (Micro and nano) systems engineering PE7_19 (Micro and nano) electronic, optoelectronic and photonic components PE7_10 (Micro and nano) electronic, optoelectronic and photonic components PE7_11 (Micro and nano) electronic, optoelectronic and photonic components PE7_11 (Micro and nano) electronic, optoelectronic		
PE5_16 Supramolecular chemistry PE5_17 Organic chemistry PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE5_19 Combinatorial chemistry PE5_19 Combinatorial chemistry PE6_10 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_11 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Scientific computing, intelligent systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Orgybology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database 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_13 Scientific computing, simulation and modelling tools PE6_14 Scientific computing, simulation and modelling tools PE6_15 Systems and Communication Engineering: Electrical, electronic, communication, optical and systems engineering PE7_10 Control engineering power components and/or systems PE7_11 Control engineering: power components and/or systems PE7_12 Electrical engineering; power components and/or systems PE7_15 (Micro and nano) systems engineering PE7_16 Communication technology, high-frequency technology PE7_17 Signal processing PE7_18 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_19 Man-machine-interfaces PE7_10 Robotics PE7_11 Components and systems for applications (in e.g. medicine, biology, environment) PE7_17 Electrical energy production, d		·
PE5_17 Organic chemistry PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE6_11 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_1 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database systems, information retrieval and digital libraries, data fusion Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video) Scientific computing, simulation and modelling tools PE6_11 Simulation and modelling tools PE6_12 Sicientific computing, simulation and modelling tools PE7_1 Control engineering PE7_2 Electrical engineering; Electrical, electronic, communication, optical and systems engineering PE7_3 Simulation engineering and modelling PE7_4 (Micro and nano) systems engineering PE7_5 (Micro and nano) systems engineering PE7_7 Signal processing PE7_9 Man-machine-interfaces PE7_10 Robotics PE7_9 Man-machine-interfaces PE7_11 Components and systems for applications (in e.g. medicine, biology, environment) PE7_12 Electrical energy production, distribution, application PE8_1 Aerospace engineering PE8_1 Aerospace engineering PE8_3 Civil engineering, architecture, maritime/hydraulic e		·
PE5_18 Molecular chemistry PE5_19 Combinatorial chemistry PE6_10 Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems PE6_11 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database systems, information retrieval and digital libraries, data fusion 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, biocomputing, and DNA and molecular computation  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_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application PE8_1 Aerospace engineering PE8_1 Aerospace engineering. Evchiical chemistry PE8_3 Civil engineering, architecture, maritime/hydrau		
PE5_19 Combinatorial chemistry  Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems  PE6_1 Computer architecture, pervasive computing, ubiquitous computing  PE6_2 Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems  PE6_3 Software engineering, operating systems, computer languages  PE6_4 Theoretical computer science, formal methods, and quantum computing  PE6_5 Cryptology, security, privacy, quantum crypto  PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory  PE6_7 Artificial intelligence, intelligent systems, multi agent systems  PE6_9 Human computer interaction and interface, visualisation and natural language processing  PE6_10 Web and information systems, database 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_13 Bioinformatics, biocomputing, and DNA and molecular computation  PE7_1 Scientific computing, simulation and modelling tools  PE7_2 Electrical engineering  PE7_2 Electrical engineering: power components and/or systems  Systems and Communication Engineering: Electrical, electronic, communication, optical and systems engineering  PE7_3 Simulation engineering power components and/or systems  PE7_4 (Micro and nano) systems engineering  PE7_5 (Micro and nano) electronic, optoelectronic and photonic components  PE7_6 Communication technology, high-frequency technology  PE7_7 Signal processing  PE7_10 Robotics  PE7_11 Components and systems for applications (in e.g. medicine, biology, environment)  PE7_12 Electrical energy production, distribution, application  PE8_1 Aerospace engineering  PE8_1 Aerospace engineering. Eventical chemistry  PE8_3 Chemical engineering, energy processes, material engineering.  PE8_4 Computational engineering.		· · · · · · · · · · · · · · · · · · ·
PE6         Computer Science and Informatics: Informatics and information systems, computer science, scientific computing, intelligent systems           PE6_1         Computer architecture, pervasive computing, ubiquitous computing           PE6_2         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_3         Software engineering, operating systems, computer languages           PE6_4         Theoretical computer science, formal methods, and quantum computing           PE6_5         Cryptology, security, privacy, quantum crypto           PE6_6         Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer graphics, computer vision, multi media, computer games           PE6_9         Human computer interaction and interface, visualisation and natural language processing           PE6_10         Web and information systems, database 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, biocomputing, and DNA and molecular computation           PSystems and Communication Engineering: Electrical, electronic, communication, opti		·
PE6_1 Computer architecture, pervasive computing, ubiquitous computing PE6_2 Systems PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database 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, biocomputing, and DNA and molecular computation PE7_1 Systems and Communication Engineering: Electrical, electronic, communication, optical and systems 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) systems engineering PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_1 Components and systems for applications (in e.g. medicine, biology, environment) PE7_10 Robotics PE7_11 Components and systems for applications (in e.g. medicine, biology, environment) PE7_12 Electrical energy production, distribution, application PE8_1 Aerospace engineering PE8_2 Chemical engineering PE8_3 Chemical engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston enginees		
PE6_1         Computer architecture, pervasive computing, ubiquitous computing           PE6_2         Computer systems, parallel/distributed systems, sensor networks, embedded systems, cyber-physical systems           PE6_3         Software engineering, operating systems, computer languages           PE6_4         Theoretical computer science, formal methods, and quantum computing           PE6_5         Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer graphics, computer vision, multi media, computer games           PE6_9         Human computer interaction and interface, visualisation and natural language processing           PE6_10         Web and information systems, database 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           PE7         Systems and Communication Engineering: Electrical, electronic, communication, optical and systems engineering           PE7_1         Control engineering           PE7_2         Electrical engineering and modelling           PE7_3         Simulation engineering and modelling           PE7_4         (Micro and nano) systems engineering <td>PE6</td> <td></td>	PE6	
PE6_3 Software engineering, operating systems, computer languages PE6_4 Theoretical computer science, formal methods, and quantum computing PE6_5 Cryptology, security, privacy, quantum crypto PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database 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, biocomputing, and DNA and molecular computation PE7_1 Control engineering PE7_2 Electrical engineering: Electrical, electronic, communication, optical and systems 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 technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application PF04_12 Electrical energy production, distribution, application PF04_13 Aerospace engineering PF08_1 Aerospace engineering, energy processes, material engineering PF08_2 Chemical engineering, energy processes, material engineering PF08_3 Givil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering	PE6_1	
PE6_3         Software engineering, operating systems, computer languages           PE6_4         Theoretical computer science, formal methods, and quantum computing           PE6_5         Cryptology, security, privacy, quantum crypto           PE6_6         Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer graphics, computer vision, multi media, computer games           PE6_9         Human computer interaction and interface, visualisation and natural language processing           PE6_10         Web and information systems, database 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_11         Simulation computing, simulation and modelling tools           PE6_12         Scientific computing, simulation and modelling tools           PE7_13         Simulation matics, biocomputing, and DNA and molecular computation           PE7_14         Systems and Communication Engineering: Electrical, electronic, communication, optical and systems engineering           PE7_2         Electrical engineering power components and/or systems           PE7_3         Simulation engineering and modelling           PE7_4         (Micro and nano) systems engineering and	PE6_2	
PE6_5         Cryptology, security, privacy, quantum crypto           PE6_6         Algorithms, distributed, parallel and network algorithms, algorithmic game theory           PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer graphics, computer vision, multi media, computer games           PE6_9         Human computer interaction and interface, visualisation and natural language processing           PE6_10         Web and information systems, database 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, biocomputing, and DNA and molecular computation           PE7_1         Costrol engineering           PE7_1         Control engineering           PE7_2         Electrical engineering: Dower 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 technology, high-frequency technology           PE7_7         Signal processing           PE7_10         Rob	PE6_3	
PE6_6 Algorithms, distributed, parallel and network algorithms, algorithmic game theory PE6_7 Artificial intelligence, intelligent systems, multi agent systems PE6_8 Computer graphics, computer vision, multi media, computer games PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database 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, biocomputing, and DNA and molecular computation PE7_1 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) electronic, optoelectronic and photonic components PE7_5 (Micro and nano) electronic, optoelectronic and photonic components PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) PE7_9 Man-machine-interfaces PE7_10 Components and systems for applications (in e.g. medicine, biology, environment) PE7_12 Electrical energy production, distribution, application PE8_1 Aerospace engineering, energy processes, material engineering PE8_1 Aerospace engineering, technical chemistry PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston enginee	PE6_4	Theoretical computer science, formal methods, and quantum computing
PE6_7         Artificial intelligence, intelligent systems, multi agent systems           PE6_8         Computer graphics, computer vision, multi media, computer games           PE6_9         Human computer interaction and interface, visualisation and natural language processing           PE6_10         Web and information systems, database systems, information retrieval and digital libraries, data fusion           ME6_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, biocomputing, and DNA and molecular computation           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_5         (Micro and nano) electronic, optoelectronic and photonic components           PE7_6         Communication technology, high-frequency technology           PE7_7         Signal processing           PE7_8         Networks (communication networks,	PE6_5	Cryptology, security, privacy, quantum crypto
PE6_8         Computer graphics, computer vision, multi media, computer games           PE6_9         Human computer interaction and interface, visualisation and natural language processing           PE6_10         Web and information systems, database 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, biocomputing, and DNA and molecular computation           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_5         (Micro and nano) electronic, optoelectronic and photonic components           PE7_6         Communication technology, high-frequency technology           PE7_7         Signal processing           PE7_8         Networks (communication networks, sensor networks, networks of robots, etc.)           PE7_9         Man-machine-interfaces<	PE6_6	Algorithms, distributed, parallel and network algorithms, algorithmic game theory
PE6_9 Human computer interaction and interface, visualisation and natural language processing PE6_10 Web and information systems, database 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, biocomputing, and DNA and molecular computation  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 technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application PE8_1 Aerospace engineering, energy processes, material engineering PE8_1 Aerospace engineering, energy processes, material engineering PE8_1 Chemical engineering, etchnical chemistry PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_7	Artificial intelligence, intelligent systems, multi agent systems
PE6_10 Web and information systems, database 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, biocomputing, and DNA and molecular computation 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 technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application PE8_1 Aerospace engineering PE8_1 Aerospace engineering, energy processes, material engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston enginee	PE6_8	Computer graphics, computer vision, multi media, computer games
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, biocomputing, and DNA and molecular computation  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 technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application PE8_1 Aerospace engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, energy processes, material engineering PE8_3 Civil engineering, technical chemistry PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_9	Human computer interaction and interface, visualisation and natural language processing
PE6_11 image, video) PE6_12 Scientific computing, simulation and modelling tools PE6_13 Bioinformatics, biocomputing, and DNA and molecular computation  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 technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application PE8_1 Aerospace engineering, energy processes, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_10	Web and information systems, database systems, information retrieval and digital libraries, data fusion
PE6_13 Bioinformatics, biocomputing, and DNA and molecular computation  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 technology, high-frequency technology  PE7_7 Signal processing  PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.)  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, application  PE8_1 Aerospace engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_11	
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 technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application PE8_1 Aerospace engineering. PE8_1 Aerospace engineering. PE8_2 Chemical engineering, energy processes, material engineering. PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_12	Scientific computing, simulation and modelling tools
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 technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application PE8_1 Aerospace engineering. Product design, process design and control, construction methods, civil engineering, energy processes, material engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE6_13	Bioinformatics, biocomputing, and DNA and molecular computation
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 technology, high-frequency technology  PE7_7 Signal processing  PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.)  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, application  PE8_1 Aerospace engineering, energy processes, material engineering  PE8_1 Aerospace engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7	
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 technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application PE8_1 Aerospace engineering, energy processes, material engineering PE8_1 Aerospace engineering, technical chemistry PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_1	Control engineering
PE7_4 (Micro and nano) systems engineering PE7_5 (Micro and nano) electronic, optoelectronic and photonic components PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy processes, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_2	Electrical engineering: power components and/or systems
PE7_5 (Micro and nano) electronic, optoelectronic and photonic components  PE7_6 Communication technology, high-frequency technology  PE7_7 Signal processing  PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.)  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, application  PE8_1 Aerospace engineering, energy processes, material engineering  PE8_1 Aerospace engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_3	Simulation engineering and modelling
PE7_6 Communication technology, high-frequency technology PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy processes, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_4	(Micro and nano) systems engineering
PE7_7 Signal processing PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy processes, material engineering PE8_1 Aerospace engineering PE8_2 Chemical engineering, technical chemistry PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_5	(Micro and nano) electronic, optoelectronic and photonic components
PE7_8 Networks (communication networks, sensor networks, networks of robots, etc.) 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, application  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy processes, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_6	Communication technology, high-frequency technology
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, application  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy processes, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_7	Signal processing
PE7_10 Robotics  PE7_11 Components and systems for applications (in e.g. medicine, biology, environment)  PE7_12 Electrical energy production, distribution, application  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy processes, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_8	Networks (communication networks, sensor networks, networks of robots, etc.)
PE7_11 Components and systems for applications (in e.g. medicine, biology, environment)  PE7_12 Electrical energy production, distribution, application  PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy processes, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_9	Man-machine-interfaces
PE7_12 Electrical energy production, distribution, application  Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy processes, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_10	Robotics
PE8 Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy processes, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_11	Components and systems for applications (in e.g. medicine, biology, environment)
methods, civil engineering, energy processes, material engineering  PE8_1 Aerospace engineering  PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE7_12	**
PE8_2 Chemical engineering, technical chemistry  PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment  PE8_4 Computational engineering  PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE8	
PE8_3 Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE8_1	
PE8_4 Computational engineering PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE8_2	Chemical engineering, technical chemistry
PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines	PE8_3	Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste treatment
	PE8_4	Computational engineering
PE8_6 Energy processes engineering	PE8_5	Fluid mechanics, hydraulic-, turbo-, and piston engines
	PE8_6	Energy processes engineering

PE8_7	Mechanical and manufacturing engineering (shaping, mounting, joining, separation)
PE8_8	Materials engineering (metals, ceramics, polymers, composites, etc.)
PE8_9	Production technology, process engineering
PE8_10	Industrial design (product design, ergonomics, man-machine interfaces, etc.)
PE8_11	Sustainable design (for recycling, for environment, eco-design)
PE8_12	Lightweight construction, textile technology
PE8_13	Industrial bioengineering
PE9	<b>Universe Sciences:</b> Astro-physics/chemistry/biology; solar system; stellar, galactic and extragalactic astronomy, planetary systems, cosmology, space science, instrumentation
PE9_1	Solar and interplanetary physics
PE9_2	Planetary systems sciences
PE9_3	Interstellar medium
PE9_4	Formation of stars and planets
PE9_5	Astrobiology
PE9_6	Stars and stellar systems
PE9_7	The Galaxy
PE9_8	Formation and evolution of galaxies
PE9_9	Clusters of galaxies and large scale structures
PE9_10	High energy and particles astronomy – X-rays, cosmic rays, gamma rays, neutrinos
PE9_11	Relativistic astrophysics
PE9_12	Dark matter, dark energy
PE9_13	Gravitational astronomy
PE9_14	Cosmology
PE9_15	Space Sciences
PE9_16	Very large data bases: archiving, handling and analysis
PE9_17	Instrumentation - telescopes, detectors and techniques
PE10	<b>Earth System Science:</b> 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, volcanology
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, crystal chemistry, isotope geochemistry, thermodynamics
PE10_12	Sedimentology, soil science, palaeontology, earth evolution
PE10_13	Physical geography
PE10_14	Earth observations from space/remote sensing
PE10_15	Geomagnetism, palaeomagnetism
PE10_16	Ozone, upper atmosphere, ionosphere
PE10_17	Hydrology, water and soil pollution
PE10_18	Cryosphere, dynamics of snow and ice cover, sea ice, permafrosts and ice sheets

### Anexa 4.3 – Domenii științifice ERC – 2016

Domain Code:	LS
Subdomain Code:	LS1, LS2, LS3, LS4, LS5, LS6
Research Area Code:	LS1_1 LS1_11, LS2_1LS2_14,

### DOMAIN LIFE SCIENCES

LS1	Molecular and Structural Biology and Biochemistry: Molecular synthesis, modification and interaction, biochemistry, biophysics, structural biology, metabolism, signal transduction	
LS1_1	Molecular interactions	
LS1_2	General biochemistry and metabolism	
LS1_3	DNA synthesis, modification, repair, recombination and degradation	
LS1_4	RNA synthesis, processing, modification and degradation	
LS1_5	Protein synthesis, modification and turnover	
LS1_6	Lipid synthesis, modification and turnover	
LS1_7	Carbohydrate synthesis, modification and turnover	
LS1_8	Biophysics (e.g. transport mechanisms, bioenergetics, fluorescence)	
LS1_9	Structural biology (crystallography and EM)	
LS1_10	Structural biology (NMR)	
LS1_11	Biochemistry and molecular mechanisms of signal transduction	
LS2	Genetics, Genomics, Bioinformatics and Systems Biology: Molecular and population genetics, genomics, transcriptomics, proteomics, metabolomics, bioinformatics, computational biology, biostatistics, biological modelling and simulation, systems biology, genetic epidemiology	
LS2_1	Genomics, comparative genomics, functional genomics	
LS2_2	Transcriptomics	
LS2_3	Proteomics	
LS2_4	Metabolomics	
LS2_5	Glycomics	
LS2_6	Molecular genetics, reverse genetics and RNAi	
LS2_7	Quantitative genetics	
LS2_8	Epigenetics and gene regulation	
LS2_9	Genetic epidemiology	
LS2_10	Bioinformatics	
LS2_11	Computational biology	
LS2_12	Biostatistics	
LS2_13	Systems biology	
LS2_14	Biological systems analysis, modelling and simulation	
LS3	<b>Cellular and Developmental Biology:</b> Cell biology, cell physiology, signal transduction, organogenesis, developmental genetics, pattern formation in plants and animals, stem cell biology	
LS3_1	Morphology and functional imaging of cells	
LS3_2	Cell biology and molecular transport mechanisms	
LS3_3	Cell cycle and division	
LS3_4	Apoptosis	
LS3_5	Cell differentiation, physiology and dynamics	
LS3_6	Organelle biology	
LS3_7	Cell signalling and cellular interactions	
LS3_8	Signal transduction	
LS3_9	Development, developmental genetics, pattern formation and embryology in animals	
LS3_10	Development, developmental genetics, pattern formation and embryology in plants	

LS3_11	Cell genetics	
LS3_12	Stem cell biology	
	Physiology, Pathophysiology and Endocrinology: Organ physiology, pathophysiology,	
LS4	endocrinology, metabolism, ageing, tumorigenesis, cardiovascular disease, metabolic syndrome	
LS4_1	Organ physiology and pathophysiology	
LS4_2	Comparative physiology and pathophysiology	
LS4_3	Endocrinology	
LS4_4	Ageing	
LS4_5	Metabolism, biological basis of metabolism related disorders	
LS4_6	Cancer and its biological basis	
LS4_7	Cardiovascular diseases	
LS4_8	Non-communicable diseases (except for neural/psychiatric, immunity-related, metabolism-related disorders, cancer and cardiovascular diseases)	
LS5	Neurosciences and Neural Disorders: Neurobiology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, neuroimaging, systems neuroscience, neurological and psychiatric disorders	
LS5_1	Neuroanatomy and neurophysiology	
LS5_2	Molecular and cellular neuroscience	
LS5_3	Neurochemistry and neuropharmacology	
LS5_4	Sensory systems (e.g. visual system, auditory system)	
LS5_5	Mechanisms of pain	
LS5_6	Developmental neurobiology	
LS5_7	Cognition (e.g. learning, memory, emotions, speech)	
LS5_8	Behavioural neuroscience (e.g. sleep, consciousness, handedness)	
LS5_9	Systems neuroscience	
LS5_10	Neuroimaging and computational neuroscience	
LS5_11	Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)	
LS5_12	Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)	
LS6	<b>Immunity and Infection:</b> The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection	
LS6_1	Innate immunity and inflammation	
LS6_2	Adaptive immunity	
LS6_3	Phagocytosis and cellular immunity	
LS6_4	Immunosignalling	
LS6_5	Immunological memory and tolerance	
LS6_6	Immunogenetics	
LS6_7	Microbiology	
LS6_8	Virology	
LS6_9	Bacteriology	
LS6_10	Parasitology	
LS6_11	Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)	
LS6_12	Biological basis of immunity related disorders (e.g. autoimmunity)	
LS6_13	Veterinary medicine and infectious diseases in animals	
LS7	<b>Diagnostic Tools, Therapies and Public Health:</b> Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics	
LS7_1	Medical engineering and technology	
LS7_2	Diagnostic tools (e.g. genetic, imaging)	
LS7_3	Pharmacology, pharmacogenomics, drug discovery and design, drug therapy	
LS7_4	Analgesia and Surgery	
LS7_5	Toxicology	
<u> </u>	1 Tomeonoby	

LS7_6	Gene therapy, cell therapy, regenerative medicine	
LS7_7	Radiation therapy	
LS7_8	Health services, health care research	
LS7_9	Public health and epidemiology	
LS7_10	Environment and health risks, occupational medicine	
LS7_11	Medical ethics	
LS8	<b>Evolutionary, Population and Environmental Biology:</b> Evolution, ecology, animal behaviour, population biology, biodiversity, biogeography, marine biology, ecotoxicology, microbial ecology	
LS8_1	Ecology (theoretical and experimental; population, species and community level)	
LS8_2	Population biology, population dynamics, population genetics	
LS8_3	Systems evolution, biological adaptation, phylogenetics, systematics, comparative biology	
LS8_4	Biodiversity, conservation biology, conservation genetics, invasion biology	
LS8_5	Evolutionary biology: evolutionary ecology and genetics, co-evolution	
LS8_6	Biogeography, macro-ecology	
LS8_7	Animal behaviour	
LS8_8	Environmental and marine biology	
LS8_9	Environmental toxicology at the population and ecosystems level	
LS8_10	Microbial ecology and evolution	
LS8_11	Species interactions (e.g. food-webs, symbiosis, parasitism, mutualism)	
LS9	<b>Applied Life Sciences and Non-Medical Biotechnology:</b> Applied plant and animal sciences; food sciences; forestry; industrial, environmental and non-medical biotechnologies, bioengineering; synthetic and chemical biology; biomimetics; bioremediation	
LS9_1	Non-medical biotechnology and genetic engineering (including transgenic organisms, recombinant proteins, biosensors, bioreactors, microbiology)	
LS9_2	Synthetic biology, chemical biology and bio-engineering	
LS9_3	Animal sciences (including animal husbandry, aquaculture, fisheries, animal welfare)	
LS9_4	Plant sciences (including crop production, plant breeding, agroecology, soil biology)	
LS9_5	Food sciences (including food technology, nutrition)	
LS9_6	Forestry and biomass production (including biofuels)	
LS9_7	Environmental biotechnology (including bioremediation, biodegradation)	
LS9_8	Biomimetics	
LS9_9	Biohazards (including biological containment, biosafety, biosecurity)	