
Alocação dos projetos Europeus por áreas científicas do IST

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Sumário Executivo:

No período de 2021 a 2024, no âmbito de diversos concursos europeus¹, geridos centralmente, foram financiados 113 projetos, submetidos via IST e/ou via IST-ID (existem projetos em que as duas instituições participam) com um volume financeiro de 37,3 M€. Apenas 6 dos projetos são individuais, sendo todos os outros em colaboração com outras entidades e, na sua maioria, multidisciplinares.

A alocação dos projetos a uma determinada área científica baseou-se no título do projeto e, por esse motivo, não determina as diferentes áreas científicas das equipas de investigação envolvidas, incluindo as do IST ou IST-ID.

A área científica onde o IST/IST-ID ganhou mais projetos foi nas ciências fundamentais (31%) e, dentro destas, a área da física é a grande vencedora. Também foram os projetos alocados às ciências fundamentais que captaram o maior volume financeiro (48%) e os instrumentos de financiamento destes projetos são do tipo: ERC, MSCA, Pathfinder, Widening, Infraestruturas, EURATOM, alguns do Pilar 2 (CL4 – Digital, Indústria e Espaço e EUHPC – Computação Avançada) e outros do Programa Digital.

¹ Horizonte Europa, Programa Digital, EURATOM, Programa Europeu da Defesa, ERASMUS, Mecanismo de Proteção Civil, Programa Cidadãos, Igualdade, Direitos e Valores e o Programa Europa Criativa.

Metodologia:

A atribuição dos projetos às áreas e sub-áreas científicas do IST (Tabela 1) foi realizada pelo autor através de:

- leitura do título do projeto e, em caso de dúvida, leitura do sumário do projeto,
- conhecimento das áreas de investigação das Unidades de Investigação e Desenvolvimento (UIDs).

A alocação dos projetos pelas áreas científicas do Técnico corresponde ao objetivo principal do projeto e não necessariamente ao trabalho desenvolvido dentro do mesmo pelas equipas de investigação do Técnico envolvidas.

Com exceção das bolsas ERC e MSCA-PF, todos os projetos são colaborativos e envolvem outras entidades além do Técnico, pelo que esta alocação não determina a área científica dos docentes/ investigadores do IST/ IST-ID envolvidos nos projetos.

Tabela 1 – Áreas e sub-áreas científicas do Técnico (fonte: website do IST²)

Áreas	Sub-áreas
Basic Sciences	Physics
	Mathematics
	Chemistry
	Biological Challenges
	Geology
Materias, Microtechnology and Nanoscience	Nuclear
	Architectural and Advanced Materials
	Micro/Nano Technologies and Nanosciences
	Electronics, Biological and Biomedical Devices
Applied Life Sciences	Biomedical Eng.
	Genomics and Systems Biology
	Modelling of Biological Systems
	Bioengineering and Biotechnology
Technology management and entrepreneurship	Cell and Tissue Engineering and Regenerative Medicine
	Decision science and Management Eng.
	Operations Logistics and Supply Chains
	Strategy, Innovation and Entrepreneurship
Information and communication technologies	Public Policies
	Computing and Informatics
	Digital transformation
	Robotics
Energy, Environment and mobility	AI and Intelligent Systems
	Telecommunications and Security
	Decarbonization and Climate challenges
	Energy efficiency, renewables, Hydrogen and energy storage
Engineering and Production Technologies	Territorial Management Urban Planning and Construction
	Geomodelling and Geophysics
	Transportation Systems
	Space, Aeronautics and Oceans
Other	Process Eng.
	Manufacturing, Automation and Industry 4.0
	Marine Technologies

² <https://tecnico.ulisboa.pt/pt/investigacao-e-inovacao/id/areas-e-centros/> (consultado a: 1/04/2025)

Resultados:

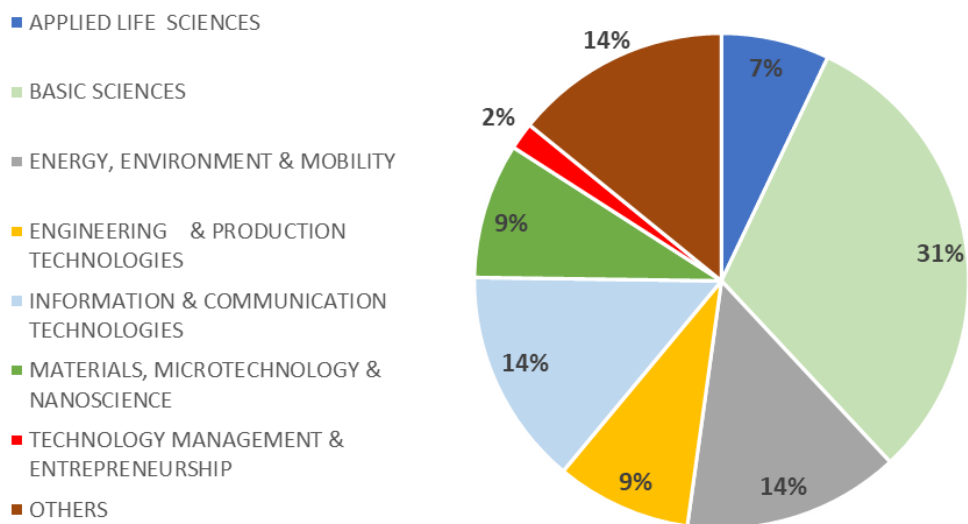


Figura 1 – Distribuição dos projetos pelas áreas científicas do Técnico (com base em nº de projetos). (fonte: cálculo do autor a partir da base de dados da Comissão Europeia à data de 7/04/2025).

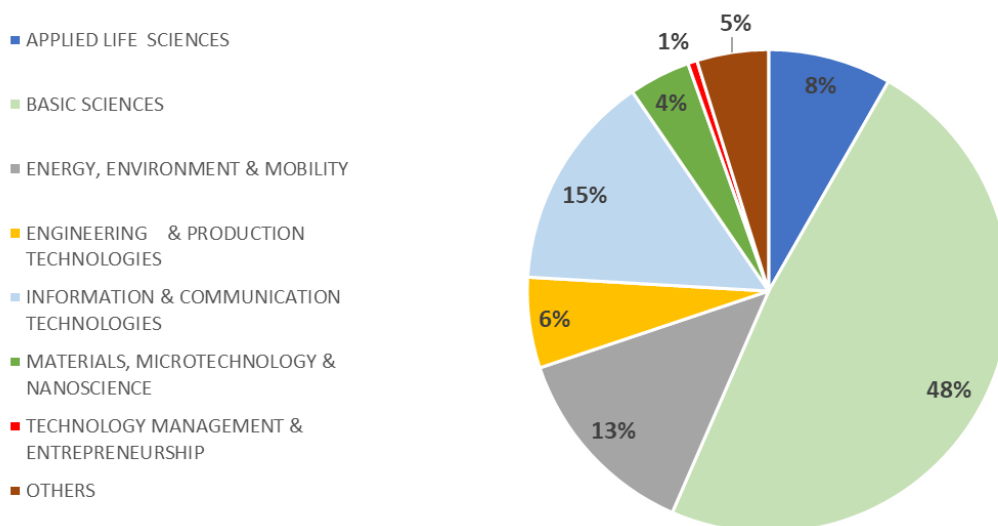


Figura 2 – Distribuição dos projetos pelas áreas científicas do Técnico (com base em volume de financiamento captado em M€). (fonte: cálculo do autor a partir da base de dados da Comissão Europeia à data de 7/04/2025).

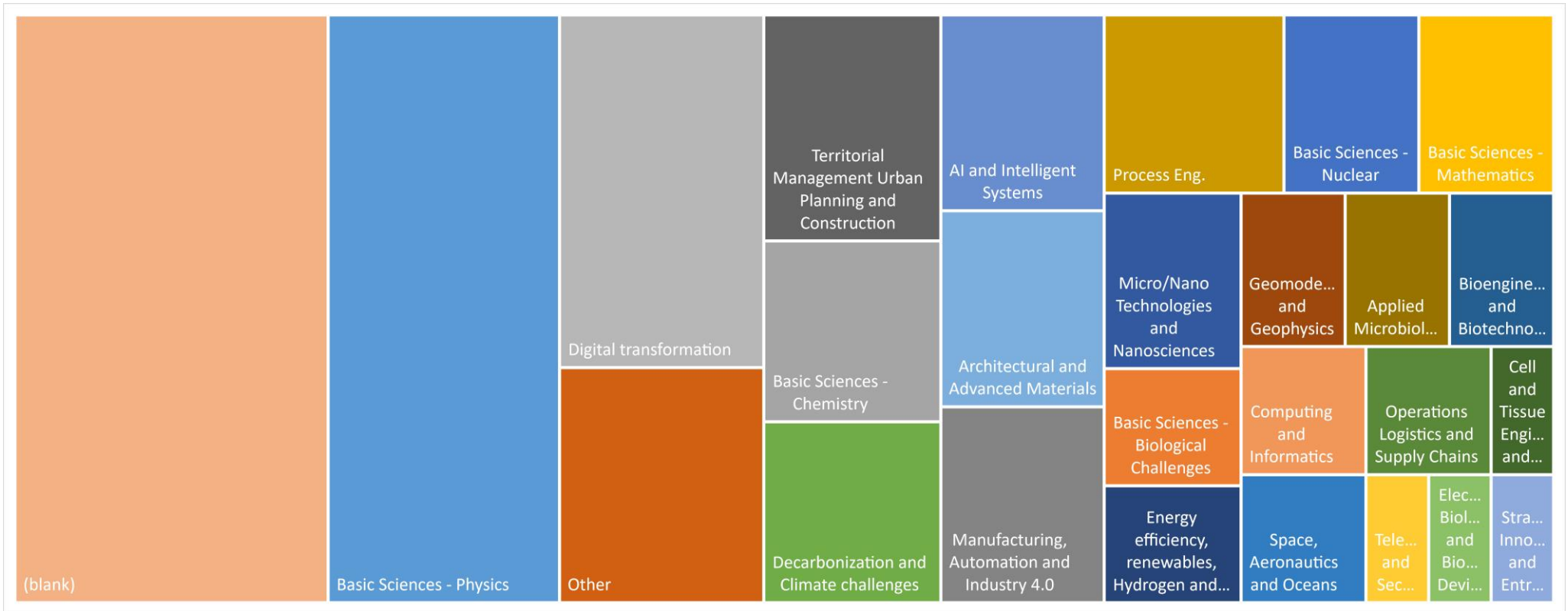


Figura 3 - Distribuição dos projetos pelas sub-áreas científicas do Técnico (com base em nº de projetos). (fonte: cálculo do autor a partir da base de dados da Comissão Europeia à data de 7/04/2025).

Tabela 2 - Lista de projetos por áreas e centros

Acrónimo	Título	Entidade	Área
FEASTS	Fostering European cellular Agriculture for Sustainable Transition Solutions	ISTID	APPLIED LIFE SCIENCES
INCHILDHEALTH	IDENTIFYING DETERMINANTS FOR INDOOR AIR QUALITY AND THEIR HEALTH IMPACT IN ENVIRONMENTS FOR CHILDREN: MEASURES TO IMPROVE INDOOR AIR QUALITY AND REDUCE DISEASE BURDENS.	ISTID	APPLIED LIFE SCIENCES
Polymers-5B	Synthesis of Bio-based and Biodegradable polymers from monomers from renewable Biowastes via Biocatalysis and Green Chemistry to contribute to European Circular Bioeconomy	ISTID	APPLIED LIFE SCIENCES
PROMISEANG	Alternative PROteins from Mlicrobial fermentation of non-conventional SEA sources for Next-Generation food, feed and non-food bio-based applications	ISTID	APPLIED LIFE SCIENCES
SURFs UP	Safe and sustainable by design microbial and lignin-based biosurfactants sourced from sustainable feedstock for home, personal care and agrochemical application	ISTID	APPLIED LIFE SCIENCES
EURAS	EUropean network for neurodevelopmental RASopathies	ISTID	APPLIED LIFE SCIENCES
GDI	Genomic Data Infrastructure	IST	APPLIED LIFE SCIENCES
RADOV	RADiation harvesting of bioactive peptides from egg prOteins and their integration in adVanced functional products	ISTID	APPLIED LIFE SCIENCES
AntiMatter-Otech	Novel High-Luminosity Photonics for AntiMatter-OTech Opaque Neutrino Detection	ISTID	Basic sciences
Bio4Pack	Biodegradable Bio-based Bioactive Packaging Technology for Supporting Food Safety	ISTID	Basic sciences
BioMembrOS	Biomimetic Membranes for Organ Support	IST	Basic sciences
CANMILK	Carbon Neutral Milk	ISTID	Basic sciences
DigiQ	DigiQ: Digitally Enhanced European Quantum Technology Master	IST	Basic sciences

DyOGOOptiMoM	Dynamic optimization with guaranteed global optimality and robustness with respect to model mismatch	IST	Basic sciences
EinsteinWaves	Einstein gravity and nonlinear waves: physical models, numerical simulations and data analysis	IST	Basic sciences
ENDOMICS	Elucidating the Evolution of Endothermy through an Endolymphomics Approach	IST	Basic sciences
ENEN2plus	Building European Nuclear Competence through continuous Advanced and Structured Education and Training Actions	IST	Basic sciences
EuPRAXIA	EuPRAXIA Preparatory Phase Project	ISTID	Basic sciences
EuPRAXIA-DN	EuPRAXIA Doctoral Network	IST	Basic sciences
EURAD-2	European Partnership on Radioactive Waste Management - 2	ISTID	Basic sciences
EuroCC 2	National Competence Centres in the framework of EuroHPC Phase 2	IST	Basic sciences
EUROfusion	Implementation of activities described in the Roadmap to Fusion during Horizon Europe through a joint programme of the members of the EUROfusion consortium	IST	Basic sciences
EURO-LABS	EUROpean Laboratories for Accelerator Based Science	IST	Basic sciences
FC-RELAX	NMR relaxometry for biomedicine and advanced materials	IST	Basic sciences
gEICKo	GEcko based Innovative Capture Kit for uncooperative and unprepared Orbital assets	ISTID	Basic sciences
LiBERA	Stochastic interacting systems: Limiting Behavior, Evaluation, Regularity and Applications	IST	Basic sciences
metaPOWER	Space-Time and Vectorial Meta-Optics for High-Power Structured Laser-Matter Interactions	ISTID	Basic sciences
MET-EFFECT	Metal complexes of a naturally inspired framework functionalized for cytotoxic and catalytic efficiency	ISTID	Basic sciences
MGICIAN	MaGnesium Alloys for effiCient solId stAte cooliNg	IST	Basic sciences
NanoXCAN	Nanoscale virus imaging X-ray microscope based on incoherent diffraction	ISTID	Basic sciences

NOSEVAC-Modelling	Hop-on NOSEVAC: Mathematical modelling of bioprocesses involved in the respiratory tract colonization and nasal vaccines	ISTID	Basic sciences
PACRI	Plasma Accelerator systems for Compact Research Infrastructures	ISTID	Basic sciences
PSST	Privacy for Smart Speech Technology	IST	Basic sciences
PTQCI	Portuguese Quantum Communications Infrastructure	IST	Basic sciences
PTQCI	Portuguese Quantum Communications Infrastructure	IT	Basic sciences
QSNP	Quantum Secure Networks Partnership	IST	Basic sciences
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QSNP	Quantum Secure Networks Partnership	IST	Basic sciences
REFINE	REsolving ambiguities in Flow boiling within micro-passages: Integrated modeliNg and Experiments	IST	Basic sciences
SHINE	Novel High-Luminosity Photonics for AntiMatter-OTech Opaque Neutrino Detection		Basic sciences
SurfEx	Epithelial Exchange Surfaces – From organizing principles to novel culture models of the gatekeepers of the body	IST	Basic sciences
SurfPlasNH3	Data and tools for studying the interactions between nitrogen-hydrogen plasma and catalytic surface toward sustainable production of ammonia	IST	Basic sciences
TraMeXI	Traceability in medical X-ray imaging dosimetry		Basic sciences
XPACE	Extreme Particle Acceleration in Shocks: from the laboratory to astrophysics	ISTID	Basic sciences
Gravitas	Black holes: gravitational engines of discovery	ISTID	Basic sciences
DMOptFES	Decision making methodologies for optimal design and operation of energy systems	IST	E-ENERGY, ENVIRONMENT & MOBILITY

GEM-SBP	GEophysical Modelling of Shelf-to-Basin Processes	IST	E-ENERGY, ENVIRONMENT & MOBILITY
ReGreenation	The next generation of green, resilient and socially inclusive smart cities	ISTID	E-ENERGY, ENVIRONMENT & MOBILITY
SIMIACCI	Sustainable Intelligent Management of Indoor Air Quality for the Culture and Creative Industries	ISTID	E-ENERGY, ENVIRONMENT & MOBILITY
AHEAD	AI-informed Holistic EVs integration Approaches for Distribution grids	ISTID	ENERGY, ENVIRONMENT & MOBILITY
AQUA-REVIVE	Reviving Monastic Water Management to Safeguard Environmental and Cultural Heritage in Alferrara, Portugal	IST	ENERGY, ENVIRONMENT & MOBILITY
BIOFIN	PROTECTING AND RESTORING BIODIVERSITY USING MAINSTREAM FINANCE (BIOFIN)	ISTID	ENERGY, ENVIRONMENT & MOBILITY
BioValue	Biodiversity value in spatial policy and planning leveraging multi-level and transformative change	ISTID	ENERGY, ENVIRONMENT & MOBILITY
CapaCITIES 2.0	Fast-Tracking the National Narrative for Climate-Neutral Urban Futures	IST	ENERGY, ENVIRONMENT & MOBILITY
DRYAD	DEMONSTRATION AND MODELLING OF NBS TO ENHANCE THE RESILIENCE OF MEDITERRANEAN AGRO-SILVO-PASTORAL ECOSYSTEMS AND LANDSCAPES (DRYAD)	ISTID	ENERGY, ENVIRONMENT & MOBILITY
GENESIS	Geologically Enhanced Nature-based Solutions for climate change resiliency of critical water InfraStructure	ISTID	ENERGY, ENVIRONMENT & MOBILITY

MAPS	Models, Assessment, and Policies for Sustainability	ISTID	ENERGY, ENVIRONMENT & MOBILITY
MI-TRAP	Mitigating TRansport-related Air Pollution in Europe	ISTID	ENERGY, ENVIRONMENT & MOBILITY
NORISK	International Masters in Risk Assessment and Management of Civil Infrastructures	IST	ENERGY, ENVIRONMENT & MOBILITY
SPINE	SMART PUBLIC TRANSPORT INITIATIVES FOR CLIMATE-NEUTRAL CITIES IN EUROPE	ISTID	ENERGY, ENVIRONMENT & MOBILITY
WINDHY	Global consortium of multi-disciplinary risk management for stable, safe, and sustainable offshore wind-hydrogen synergy as a new renewable energy solution	ISTID	ENERGY, ENVIRONMENT & MOBILITY
BoSS	Bauhaus of the Seas Sails	ISTID	ENGINEERING & PRODUCTION TECHNOLOGIES
CRITERIA	CRItical raw maTERIAL treatment and recovery from mining tailings and waste dumps	IST	ENGINEERING & PRODUCTION TECHNOLOGIES
IMPACTIVE	Innovative Mechanochemical Processes to synthesize green ACTIVE pharmaceutical ingredients.	ISTID	ENGINEERING & PRODUCTION TECHNOLOGIES
ISOP	Innovation in Supercritical CO2 Power generation systems	IST	ENGINEERING & PRODUCTION TECHNOLOGIES

MANIFESTS Genius	MANIFESTS Genius - MANIFESTS: From Gases and Evaporators risk assessment towards an Integrated management of sea and land pollution incidents	ISTID	ENGINEERING & PRODUCTION TECHNOLOGIES
RealIMP	Real-time imaging and photocatalysis mediated biodegradability of microplastics in a continuous flow system	IST	ENGINEERING & PRODUCTION TECHNOLOGIES
DISCOVER	Digital, autonomous, Intelligent and Synchronous system for Continuous identification, Optimization and Value Extraction of Resources from the end-of-use built environment	IST	ENGINEERING & PRODUCTION TECHNOLOGIES
PiezoHearts	Manufacturing of wireless and three-dimensional piezoelectric scaffolds to engineer in vitro 'hearts'	ISTID	ENGINEERING & PRODUCTION TECHNOLOGIES
SYNTECS	Sustainably and digitally driven hierarchical laser texturing for complex surfaces	ISTID	ENGINEERING & PRODUCTION TECHNOLOGIES
DCitizens	Fostering Digital Civics Research and Innovation in Lisbon	ISTID	INFORMATION & COMMUNICATION TECHNOLOGIES
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DIG4BIO	Digitalisation of Biomanufacturing of Plasmids for the Development of Advanced Therapy Modalities	ISTID	INFORMATION & COMMUNICATION TECHNOLOGIES

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RELISH	Reframing European Gastronomy Legacy through Innovation Sustainability and Heritage	ISTID	INFORMATION & COMMUNICATION TECHNOLOGIES
SHIFT2DC	SHIFT to Direct Current	ISTID	INFORMATION & COMMUNICATION TECHNOLOGIES
ATTRACT	Digital Innovation Hub for Artificial Intelligence and High-Performance Computing	IST	INFORMATION & COMMUNICATION TECHNOLOGIES
CoDaS	Communications Engineering and Data Science	IST	INFORMATION & COMMUNICATION TECHNOLOGIES
euROBIN	European ROBotics and AI Network	ISTID	INFORMATION & COMMUNICATION TECHNOLOGIES
GreenFieldData	IoRT Data management and analysis for Sustainable Agriculture	IST	INFORMATION & COMMUNICATION TECHNOLOGIES
IQ-BRAIN	Improving QMRI By Realizing trustworthy integration of AI in Neuro-imaging	IST	INFORMATION & COMMUNICATION TECHNOLOGIES

LoGaCulture	Locative Games for Cultural Heritage	ISTID	INFORMATION & COMMUNICATION TECHNOLOGIES
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MINOTAUR	Miniaturized Robotic Systems for Autonomous In-Situ Exploration of Critical Raw Materials In Deep Land Deposits	ISTID	INFORMATION & COMMUNICATION TECHNOLOGIES
MODINA	Movement, Digital Intelligence and Interactive Audience	ISTID	INFORMATION & COMMUNICATION TECHNOLOGIES
Nextgen Hopon	Multimodal Data Integration in Personalized Cardiovascular Medicine (Nextgen HOP-on)	ISTID	INFORMATION & COMMUNICATION TECHNOLOGIES
Eco-Mortar 2.0	Eco-friendly and high-performance thermal insulating fibre reinforced mortar to be applied on walls as a coating or panel	IST	MATERIALS, MICROTECHNOLOGY & NANOSCIENCE
FRP_plus_plus	European Master in Advanced Structural Analysis and Design using Composite Materials	IST	MATERIALS, MICROTECHNOLOGY & NANOSCIENCE
GreenChips-EDU	Building a Digitally-Supported Education Ecosystem for Next Generation Microelectronics Experts in Sustainable Chips and Applications for a Green and Circular Economy	IST	MATERIALS, MICROTECHNOLOGY & NANOSCIENCE

GreenChips-EDU	Building a Digitally-Supported Education Ecosystem for Next Generation Microelectronics Experts in Sustainable Chips and Applications for a Green and Circular Economy	IST	MATERIALS, MICROTECHNOLOGY & NANOSCIENCE
NMR-IMPROV	NMR relaxation tools for improving and protecting quality of dairy products	IST	MATERIALS, MICROTECHNOLOGY & NANOSCIENCE
PHOTONGATE	Development of photonic multi-sensing systems based on molecular-gates biorecognition and plasmonic sensors	ISTID	MATERIALS, MICROTECHNOLOGY & NANOSCIENCE
POEMS	PORTUGUESE COMPETENCE CENTRE IN SEMICONDUCTORS	IST	MATERIALS, MICROTECHNOLOGY & NANOSCIENCE
ReMade-at-ARI	RECYCLABLE MATERIALS DEVELOPMENT at ANALYTICAL RESEARCH INFRASTRUCTURES	IST	MATERIALS, MICROTECHNOLOGY & NANOSCIENCE
RIANA	Research Infrastructure Access in NANoscience & nanotechnology	IST	MATERIALS, MICROTECHNOLOGY & NANOSCIENCE
RIANA	Research Infrastructure Access in NANoscience & nanotechnology	IST	MATERIALS, MICROTECHNOLOGY & NANOSCIENCE
PRODUTECH DIH	PRODUTECH DIH	IST	ENGINEERING & PRODUCTION TECHNOLOGIES

RESILIENCE-R-2023	First research action for Medical counter measures performed in the frame of the RESILIENCE FPA consortium	IST-ID	Others
AToUT	Health/well being, Global changes, and Sustainable transitions in University of Toulouse	IST	Others
EPOS ON	EPOS Optimization and EvolutioN	ISTID	Others
GreenNexUS	Green-health-safety Nexus for new Urban Spaces	IST	Others
GuideRadPROS	Harmonisation, update and implementation of standards related to radiation protection dosimeters for photon radiation		Others
kNOwHATE	kNOwing online HATE speech: knowledge + awareness = TacklingHate	ISTID	Others
PIANOFORTE	Partnership for european research in radiation protection and detection of ionising radiation : towards a safer use and improved protection of the environment and human health.	IST	Others
SECURE2	SUSTAINABLE CAREERS FOR RESEARCH EMPOWERMENT 2	IST	Others
SPECTRUM	Solar PolyGeneration Collector for combined heaT, powerR, hydrogen fUel and wastewater treatMent	ISTID	Others
STEP UP	Sustainable Livestock Systems Transition and Evidence Platform for Upgrading Policies	ISTID	Others
Talent Pass	Fostering European Talents for Widening Circular Economy	ISTID	Others
TIDAL ArtS	TIDAL ArtS: TransformIng anD inspiring Aquatic Landscapes through Art and Sciences	ISTID	Others
TOPIO	TOWARDS DEMOCRATIC LANDSCAPE OBSERVATION THROUGH GEOINFORMATICS AND PUBLIC PARTICIPATION	ISTID	Others
UNIVERSEH 2.0	European University for Earth and Humanity 2.0	IST	Others
WinWin4WorkLife	Healthy, inclusive and sustainable remote work futures as a Win-Win for employees and employers in urban, rural and cross-border areas	ISTID	Others
Accelerate_FutureHEI	Entrepreneurial & Innovative Universities Acceleration Programme	IST	TECHNOLOGY MANAGEMENT & ENTREPRENEURSHIP

CoReRetail	European Network for Collaboration and Research in the Future of Retail Operations		TECHNOLOGY MANAGEMENT & ENTREPRENEURSHIP
INNOVISION	Innovation in Vision Research Postdoctoral Training Network	IST	