



ELECTIVE SUBJECTS

Choose at least 6 ECTS by taking either one subject worth 6 or more ECTS, or two subjects that add up to at least 6 ECTS.

Elective	PhD Programme	ULisboa School	Semester	ECTS
Adaptation and Mitigation of Climate Change	Climate Change and Sustainable Development Policies	Various	2	5
Sustainability Advanced Studies	Various	FC	1	6
Advanced Topics in Artificial Intelligence	Cognitive Science	FC	1	6
Advanced Topics in Multivariate Analysis	Statistics and Stochastic Processes	IST	2	6
Advanced Topics in Stochastic Processes	Statistics and Stochastic Processes	IST	2	6
Advanced Topics in Water Resources and Environment	Civil Engineering	IST	2	6
Agriculture and Food Security for Development	Agricultural Innovation in Tropical Food Chains	ISA	1	3
Architecture of Dwelling	Architecture/Design/Urbanism	FA	2	10
Architecture and the City	Architecture/Design/Urbanism	FA	2	10
Artificial Intelligence Applied to Building and City Efficiency	Architecture/Design/Urbanism	FA	2	10
Big Data	Informatics	FC	1	6
Biodiversity and Ecosystem Services	Sustainability Science	RUL	1	6
Biodiversity and Global Change	Biology and Ecology of Global Changes	FC	1	6
Climate Change Science	Climate Change and Sustainable Development Policies	FC	1	5
Clinical Research and Transversal Areas to Science	Lisbon Academic Medical Centre	FM	1	3
Chronic Noncommunicable Diseases and Planetary Health	Lisbon Academic Medical Centre	FM	1	3

Data and research methods in Population Sciences	Population Sciences	Various	1	6
Decision Analysis Models and Applications	Engineering and Management	IST	2	6
Demography: population measures and dynamics	Population Sciences	Various	1	9
Design and Writing a Research Project	Transversal Skills, All PhD programs	IST	2	3
Design for Social Innovation	Architecture/Design/Urbanism	FA	2	10
Design Thinking Approach to Research	Transversal Skills, All PhD programs	IST	2	3
Earth Systems	Climate Change and Sustainable Development Policies	IST	1	5
Ecological Economics	Sustainable Energy Systems	IST	1	6
Economics and Strategy - Theory and Applications	Engineering and Management	IST	2	6
Electrochemical Energy Storage and Conversion Systems	Sustainable Energy Systems	FC	1	6
Energy, Environment and Sustainability	Sustainable Energy Systems	IST	1	6
Energy, Environment and Sustainability	Sustainable Energy Systems	FC	1	6
Engineering for Sustainable Development	Transversal Skills, All PhD programs	IST	2	3
Entrepreneurship, Innovation and Technology Transfer	Various	FC	1	6
Functioning and Monitoring of River Systems	Sustainable Land Use	ISA	1	6
Habitat 21	Architecture/Design/Urbanism	FA	2	10
Health Care Systems and Services Research	Engineering and Management	IST	2	6
Human-Centred Design	Architecture/Design/Urbanism	FA	2	10
Human Health in a Changing Climate	Lisbon Academic Medical Centre	FM		3
Integrated Biorefineries: Biofuels, Biopower and Bioproducts	Sustainable Energy Systems	FC	1	6
Integrated Resources Management	Agricultural Innovation in Tropical Food Chains	ISA	1	3

<u>Methods and Applications in Earth Sciences and Environment</u>	Energy and Earth Resources	IST	2	6
<u>Models and Applications in Operations, Logistics & Supply Chain Management</u>	Engineering and Management	IST	1	6
<u>One Health</u>		FMV	1	3
<u>Optimization and Applications</u>	Engineering and Management	IST	1	6
<u>Radiation Protection and Dosimetry</u>	Engineering and Nuclear Sciences	IST	1	6
<u>Radiation and Health Sciences</u>	Engineering and Nuclear Sciences	IST	2	6
<u>Risk Analysis Applied to “One Health”</u>		FMV	1	3
<u>Seminars in Energy and Earth Resources</u>	Energy and Earth Resources	IST	2	6
<u>Spatial Data Sciences</u>	Energy and Earth Resources	IST	1	6
<u>Sustainable Mobility</u>	Sustainable Energy Systems	FC	1	6
<u>Theory and Practice of Policy Analysis</u>	Engineering and Public Policy	IST	1,2	6
<u>Tropical Farming Systems Optimisation</u>	Agricultural Innovation in Tropical Food Chains	ISA	1	3
<u>Urban and Regional Systems and Sustainability</u>	Civil Engineering	IST	2	6
<u>Land Use and Water Management</u>	Sustainable Land Use	ISA	2	6

FA, Faculty of Architecture; FC, Faculty of Sciences; FM, Faculty of Medicine; FMV, Faculty of veterinary Medicine; IST, Instituto Superior Técnico; ISA, Instituto Superior de Agronomia (School of Agriculture); RUL, Rectorate University of Lisbon