



INSTITUTE FOR
Sustainability Science
AND TECHNOLOGY

2021 – 2022
ANNUAL REPORT



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

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1. PRESENTATION

The Research Institute for Sustainability and Technology of UPC – BarcelonaTech is the responsible unit for promoting, coordinating, and carrying out academic activities in the fields of sustainability science and sustainable technologies.

The Institute's mission is to generate technical and conceptual tools to create a more sustainable production and development model and to collaborate in the UPC's endeavour to provide scientific and technical support for human, social, cultural, and economic progress.

The IS.UPC is active in higher education, research and innovation, technology transfer and promotion of sustainable culture.

Its main objectives are as follows:

- Opening up sustainability research to UPC groups and researchers, by coordinating and promoting multi and trans-disciplinary research projects.
- Organising and promoting specific postgraduate courses and degrees (Master's degrees, PhD programmes and other specialised teaching activities) directly linked with the UPC research in the fields of sustainability science and sustainable technologies, as well as embedding sustainability in other UPC educational programmes.
- Disseminating the results of the research carried out at the IS.UPC, both to the university community and to the society as a whole and sparking discussion about it.
- Encouraging the commitment and interaction of the UPC within society and encouraging UPC's support of civic demands for promoting progress towards more sustainable development models.

Letter from the Director

The Institute for Sustainability Science and Technology (IIST.UPC) is a catalyst for excellent interdisciplinary and transdisciplinary research across Universitat Politècnica de Catalunya that is working for global sustainability.

Today, our institute assembles more than 200 professionals, including staff scientists, postdocs, PhD students, technicians, general research support staff and administrators, devoted to the well-functioning of ISST.UPC.

This Annual Report covers the activities of ISST.UPC of the academic year 2021-2022. During this period, main efforts have focused on consolidating an interdisciplinary academic space within the UPC community to face the challenges of sustainable human development through science progress and technology innovation. The integration of economic, environmental, and social aspects of technology, architecture, and engineering, as well as the reference points of closing of cycles and systemic thinking, are some of the distinctive characteristics of the Institute research focus. Academic excellence, strategic international and local networking, and a trans-disciplinary approach to knowledge creation and dissemination are other key characteristics of the Institute.

The ISST.UPC has its own Master degree in Sustainability Science and Technology (2 years – 120 ECTS) and the PhD programme in Sustainability (89 PhD students).

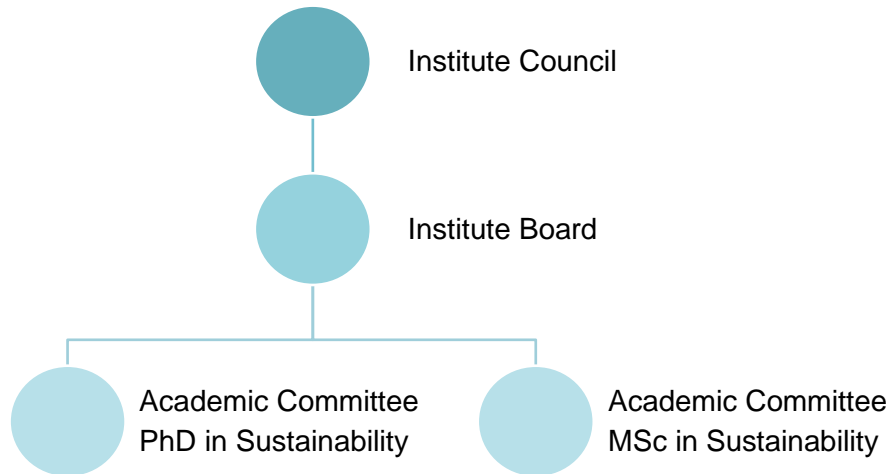
Finally, I would like to highlight the national and international recognition that our institute is achieving in sustainability science, with many of the research groups that constitute an outstanding international reference in their areas of expertise.

I would like to express my profound gratitude to the whole of the ISST.UPC personnel, at every professional level for their dedication, motivation, and enthusiasm!

Jordi Segalàs, director

2. ORGANISATION STRUCTURE

2.1. ORGANISATION CHART



2.2. INSTITUTE BODIES

Single-member bodies

SEGALÀS CORAL, JORDI

Director

VILLARES JUNYENT, MÍRIAM

Secretary

ALCARAZ SENDRA, OLGA

Deputy Director

2.3. COLLEGIATE BODIES OF GOVERNMENT AND REPRESENTATION

Institute Board

SEGALÀS CORAL, JORDI	<i>Director</i>
ALCARAZ SENDRA, OLGA	<i>Subdirectory</i>
VILLARES JUNYENT, MÍRIAM	<i>Academic Secretary</i>
ROCA BOSCH, ELISABETH	
SUREDA CARBONELL, BÁRBARA	
ROSAS CASALS, MARTÍ	
GAROLA CRESPO, ÀLVAR	
ALVAREZ DEL CASTILLO, JAVIER	
CLIMENT VILARO, JUAN	
CUCHÍ BURGOS, ALBERTO	
GIBERT, KARINA	
MAGRINYA TORNER, FRANCESC	
MARTIN ESCOFET, CARMÉ	
MORATO FARRERAS, JORDI	
DE PABLO RIBAS, JOAN	
RIBA ROMEVA, CARLES	
ROCA ROSELL, ANTONI-MARIA CLARET	
SANCHEZ CARRACEDO, FERMIN	
TRULLOLS FARRENY, ENRIC	
VIDAL LOPEZ, EVA	
LAZZARINI, BORIS	<i>Research Staff representative</i>
TEJEDOR PAPELL, GEMMA	<i>Research Staff representative</i>
WYBRANIEC, BARTOSZ	<i>Students' representative</i>

Institute Council

SEGALÀS CORAL, JORDI	<i>Director</i>
ALCARAZ SENDRA, OLGA	<i>Subdirectory</i>
VILLARES JUNYENT, MÍRIAM	<i>Academic Secretary</i>
ROCA BOSCH, ELISABETH	
SUREDA CARBONELL, BÀRBARA	
ROSAS CASALS, MARTÍ	
GAROLA CRESPO, ÀLVAR	
ALVAREZ DEL CASTILLO, JAVIER	
CLIMENT VILARO, JUAN	
CUCHÍ BURGOS, ALBERTO	
GIBERT, KARINA	
MAGRINYA TORNER, FRANCESC	
MARTIN ESCOFET, CARMÉ	
MORATO FARRERAS, JORDI	
DE PABLO RIBAS, JOAN	
RIBA ROMEVA, CARLES	
ROCA ROSELL, ANTONI-MARIA CLARET	
SANCHEZ CARRACEDO, FERMIN	
TRULLOLS FARRENY, ENRIC	
VIDAL LOPEZ, EVA	
LAZZARINI, BORIS	<i>Research Support Staff</i>
TEJEDOR PAPELL, GEMMA	<i>Research Support Staff</i>
ASUA BERASALUCE, JOANA	<i>Scholarship INIREC</i>
GARCIA GALOFRE, VICTOR	<i>Scholarship INIREC</i>
OLIVER MARÍN, ANDREA	<i>Scholarship for apprenticeships</i>
WYBRANIEC, BARTOSZ	<i>Scholarship for apprenticeships</i>

2.4. COLLEGIATE BODIES FOR CONSULTATION

Academic Committee of the Master's in Sustainability Science and Technology

ALCARAZ SENDRA, OLGA	<i>Co-coordinator</i>
VILLARES JUNYENT, MÍRIAM	<i>Co-coordinator</i>
GAROLA CRESPO, ÀLVAR	<i>University-Company Collaboration Agreements/ Employment Opportunities</i>
ROCA BOSCH, ELISABET	<i>International Mobility and Double Degrees</i>
ROSAS CASALS, MARTÍ	<i>Quality and Tutorial Action Plan</i>
SUREDA CARBONELL, BÁRBARA	<i>Final Master's Thesis</i>
ALIER FORMENT, MARC	<i>Teaching and Research Staff</i>
DE LA HOZ CASAS, JORDI	<i>Teaching and Research Staff</i>
DE PABLO RIBAS, JOAN	<i>Teaching and Research Staff</i>
ETXEBERRIA LARRANAGA, MIREN	<i>Teaching and Research Staff</i>
GASSÓ DOMINGO, SANTIAGO	<i>Teaching and Research Staff</i>
GIBERT OLIVERAS, KARINA	<i>Teaching and Research Staff</i>
GIL ROIG, JOSÉ MARÍA	<i>Teaching and Research Staff</i>
LOPEZ LOPEZ, JOSE	<i>Teaching and Research Staff</i>
MAGRINYÀ TORNER, FRANCESC	<i>Teaching and Research Staff</i>
MERCADÉ ALOY, JOSEP	<i>Teaching and Research Staff</i>
MORATÓ FARRERAS, JORDI	<i>Teaching and Research Staff</i>
SANCHEZ MARRE, MIQUEL	<i>Teaching and Research Staff</i>
SANCHEZ VILA, FRANCISCO JAVIER	<i>Teaching and Research Staff</i>
SEGALÀS CORAL, JORDI	<i>Teaching and Research Staff</i>
VIDAL LOPEZ, EVA MARIA	<i>Teaching and Research Staff</i>
LAZZARINI, BORIS	<i>Research Support Staff</i>
TEJEDOR PAPELL, GEMMA	<i>Research Support Staff</i>

Academic Committee of the PhD programme in Sustainability

GIL ROIG, JOSÉ MARÍA	<i>Coordinator</i>
VILLARES JUNYENT, MÍRIAM	<i>Secretary</i>
CHAMS, NOUR	
DE LA FUENTE ANTEQUERA, ALBERT	
GIBERT OLIVERAS, KARINA	
ROCA ROSELL, ANTONI	

2.5. FACULTY AND STUDENTS' PARTICIPATION

2.5.1. MEMBERS OF THE INSTITUTE

Academic Staff

ALCARAZ SENDRA, OLGA
ALVAREZ DEL CASTILLO, JAVIER
CLARET ROCA ROSELL, ANTONI-MARIA
CLIMENT VILARO, JUAN
CUCHÍ BURGOS, ALBERTO
DE PABLO RIBAS, JOAN
GAROLA CRESPO, ÀLVAR
GIBERT OLIVERAS, KARINA
MARGINYA TORNER, FRANCESC
MARTIN ESCOFET, CARMÉ
MORATO FARRERAS, JORDI
RIBA ROMEVA, CARLES
ROCA BOSCH, ELISABET
ROSAS CASALS, MARTÍ
SANCHEZ CARRACEDO, FERMIN
SEGALÀS CORAL, JORDI
SUREDA CARBONELL, BÁRBARA
TRULLOLS FARRENY, ENRIC
VIDAL LOPEZ, EVA
VILLARES JUNYENT, MÍRIAM

Support for Research Staff

LAZZARINI, BORIS
TEJEDOR PAPELL, GEMMA

2.5.2. MASTER IN SUSTAINABILITY SCIENCE AND TECHNOLOGY

Faculty responsible for the organisation and planning of master's subjects:

ALCARAZ SENDRA, OLGA
ALIER FORMENT, MARC
DE LA HOZ CASAS, JORDI
DE PABLO RIBAS, JOAN
ETXEBERRIA LARRANAGA, MIREN
GAROLA CRESPO, ÁLVARO
GASSÓ DOMINGO, SANTIAGO
GIBERT OLIVERAS, KARINA
GIL ROIG, JOSÉ MARÍA
LÓPEZ LÓPEZ, JOSE
MAGRINYÀ TORNER, FRANCESC
MERCADÉ ALOY, JOSEP
MORATÓ FARRERAS, JORDI
ROCA BOSCH, ELISABET
ROSAS CASALS, MARTÍ
SANCHEZ MARRE, MIQUEL
SÁNCHEZ-VILA, FRANCISCO JAVIER
SEGALÀS CORAL, JORDI
SUREDA CARBONELL, BÁRBARA
VIDAL LÓPEZ, EVA MARIA
VILLARES JUNYENT, MÍRIAM

2.5.3. DOCTORATE IN SUSTAINABILITY

UPC researchers responsible for the mentoring of doctoral theses:

AGUADO DE CEA, ANTONIO
ALCARAZ SENDRA, OLGA
ALIER FORMENT, MARC
ALVAREZ DEL CASTILLO, JAVIER
ALVAREZ DEL CASTILLO, M. DOLORES
ALMANTE GARCIA, BEATRIZ
BAIRAN GARCIA, JESUS MIGUEL
BARCELO GARCIA, MIQUEL
BOSCH TOUS, RICARD
CADAFALCH RABASA, JORDI
CARRILLO NAVARRETE, FERNANDO
CONSUL SERRACANTA, RICARD
CREMADES OLIVER, LÁZARO V.
CUCHÍ BURGOS, ALBERTO
DARBRA ROMAN, ROSA MARÍA
DE LA FUENTE ANTEQUERA, ALBERT
DE LA HOZ CASAS, JORDI
DOMENECH LEGA, BRUNO
ESCRIBANO RODRIGUEZ DE ROBLES, BEATRIZ
FELIPE BLANCH, JOSE JUAN DE

FERRER MARTI, LAIA
FONSECA CASAS, PAU
FUERTES PEREZ, PERE
GANGOLELLS SOLANELLAS, MARTA
GARCIA ALMIÑANA, JORDI
GARCIA CARRILLO, AGUEDA
GARRIDO SORIANO, NURIA
GIL ROIG, JOSE MARIA
HAURIE IBARRA, LAIA
KALLAS CALOT, ZEIN
LOPEZ ALVAREZ, DAVID

MARTIN CAÑADAS, MARIA ELENA
MASPOCH RULDUA, MARIA LUÏSA
MAYORGA CARDENAS, MIGUEL YURI
MONGUET FIERRO, JOSEP MARIA
MONTSERRAT JORDA, JOSEP
MORATO FARRERAS, JORDI
NAVARRO MOLDES, LEANDRO
OLMEDO TORRE, NOELIA
ORTEGO MARTINEZ, MARIBEL
PABLO RIBAS, JOAN DE
PARDO BOSCH, FRANCESC
PEÑA CARRERA, MARTA
PEREZ FOGUET, AGUSTÍ
PUJADAS ALVAREZ, PABLO
QUERA MIRO, MANUEL
RAHMANI MEDDOUR, DJAMEL
RIBA ROMEVA, CARLES
ROCA BOSCH, ELISABETH
ROCA ROSELL, ANTONI
RODRIGUEZ CANTALAPIEDRA,
INMACULADA
ROSAS CASALS, MARTI
RUIZ MANSILLA, RAFAEL
SABATER PRUNA, ASSUMPTA
SALAN BALLESTEROS, M. NÚRIA
SEGALAS CORAL, JORDI
TORRES LOPEZ, ANTONIO LUIS
TRULLOLS FARRENY, ENRIC
VALDERRAMA ANGEL, CESAR ALBERTO
VELO GARCIA, ENRIQUE
VIDAL LOPEZ, EVA
VILLARES JUNYENT, MÍRIAM
XERCAVINS VALLS, JOSEP

2.5.4. STUDENTS

Number of students:

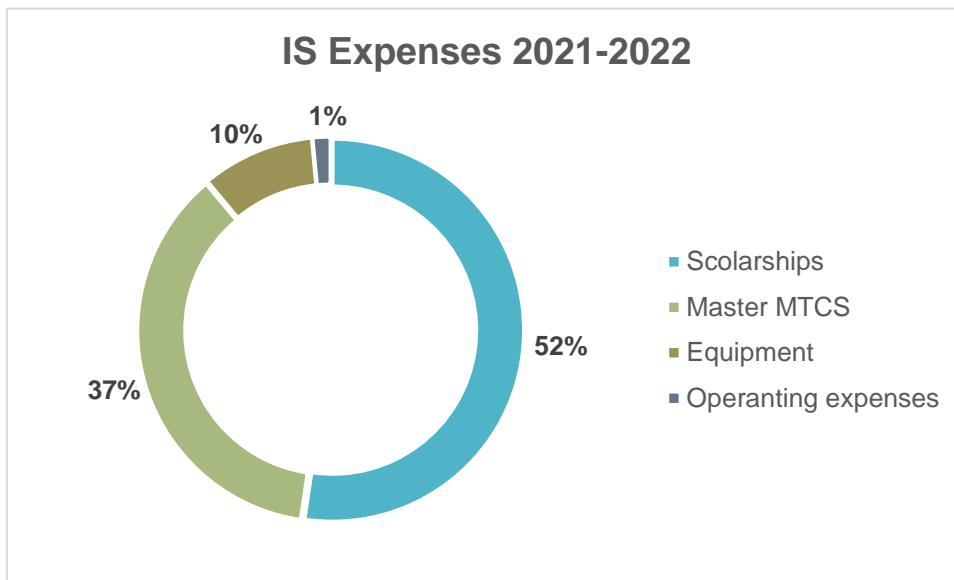
Academic year 2021 - 2022

Master in Sustainability Science and Technology	47
PhD in Sustainability	93

3. FINANCIAL INFORMATION

A description of IS.UPC internal operational account and its distribution for the course 2021 - 2022, related just to UPC financing, is summarised below.

	UPC	Scholarships	Master MTCS	Equipment	Operating expenses	TOTAL
INCOME	18.356,00 €					18.356,00 €
EXPENSES		9.486,44 €	6.628,00 €	1.734,00 €	273,78 €	18.122,22 €



Section 4 'Research and Projects' details the external income related to ongoing projects, which has been used to carry on the respective projects.

4. RESEARCH AND PROJECTS

This section details research projects, agreements and collaborations undertaken by ISST.UPC researchers.

4.1. ONGOING PROJECTS

Participation in a competitive R&D project

Grup de recerca en Ciència Intel·ligent de Dades i Intel·ligència Artificial

Scientific coordinator: Gibert, Karina.

Participants: Ageno, A.; Cortes, U.; Sànchez-Marrè, M.; Vazquez-Salceda, J.; Martin, M.; Bejar, J.; Sangüesa, R.; Barrue, C.; Angerri Torredelot, Xavier; Domingo, J.; Solé-Pareta, J.; Careglio, D.; Cruellas, J.; Barlet, P.; Albert Cabellos-Aparicio; Perello, J.; Germán Santos-Boada; Romero, E.; Vellido, A.; Arratia, A.; Belanche, Ll.; Delgado, J.; Nebot, A.; Mugica, F.; König, C.; Casas, J.; Marques, F.; Morros, J.R.; Oliveras, A.; Pardas, M.; Ruiz-Hidalgo, J.; Salembier, P.; Sayrol, E.; Vilaplana, V.; Turmo, J.; Padro, L.; Català Roig, N.; Escudero, G.; Farreres, J.; Gatiús, M.; Angulo, C.; Sanchez, M.; Ruiz, F.; Aguado, J. Carlos; Raya, C.; Hernando, J.; Nadeu, C.; Fonollosa, José A. R.; Monte, E.; Nogueiras, A.; Esquerra, I.; Escolano, C.; Gerard I. Gallego; Ferrando, J.; Tsiamas, I.; Paillisse, J.; Alarcon, E.; Hernández-Carnerero, À.; Bagherzade, M.; Houegnigan, L.; S. Abadal; Ferriol, M.; Buxons, M.; Oliva, L..

Date: 01/01/2022-31/12/2024. **Duration:** 03.00.00.

Funding: 40000.0€.

Scope: Regional. Entity where it is developed: Department of Statistics and Operations Research.

Funding entities: AGAUR. Agència de Gestió d'Ajuts Universitaris i de Recerca.

Ciutadania: Intel·ligència Artificial per a tothom

Scientific coordinator: Gibert, Karina.

Participants: Belen Alastruey; Angulo, C.; Arias, M.; Albert Cabellos-Aparicio; Cortes, U.; Martin, M.; Morros, J.R.; Nebot, A.; Padro, L.; Sabater, A.; Sànchez-Marrè, M.; Conti, D.; Hernando, J.; Sangüesa, R.; Vazquez-Salceda, J.; Iruela, A..

Date: 01/12/2020-31/10/2021. **Duration:** 00.11.00.

Funding: 50000.0€.

Scope: Regional. Entity where it is developed: i2CAT Foundation.

Funding entities: Generalitat de Catalunya. Departament de la Vicepresidència i de Politiques Digitals i Territori; <https://ciutadania.cat/>

Red de Innovación de Nuevas Tecnologías en Salud Mental (TECSAM)

Scientific coordinator: Haro, J.; Gibert, Karina.

Participants: Nebot, A.; Vellido, A.; Mugica, F.; Gibert, Karina; Barrue, C.; Ruiz, F.; Raya, C.; Aguado, J. Carlos; Prats, F.; Sanchez, M.; Angulo, C..

Date: 01/07/2020-31/12/2022. **Duration:** 02.06.00.

Funding: 379908.0€.

Scope: National. Entity where it is developed: Fundació per a la recerca i la docència Sant Joan de Dèu.

Funding entities: Fondos FEDER.

Ensure fair NEXUS transition for climate change adaptation and sustainable development implementation based on coupled nature-based systems and bioeconomy

Scientific coordinator: Morato, J..

Participants: Alvarez, J.; Fonseca, P.; Penagos, G.; Villanueva, B.; Perez, L.M.; Díaz, L.; Sánchez, O.; Pastor, R.; Gil, J.M.; Taghouti, I.; Kallas, Z.; Guesmi, B.

Date: 01/04/2022-31/03/2025. Duration: 03.00.00.

Funding: 465560.0€.

Scope: International. Entity where it is developed: UNESCO Sustainability Chair.

Funding entities: European Commission; <https://www.unescosost.org/post/approved-a-new-project-surenexus-eu-prima>

Alianzas para la Emergència Climática y Sanitaria del Valle de Aburra

Scientific coordinator: Morato, J..

Date: 01/09/2021-31/08/2023. Duration: 02.00.00.

Funding: 78770.0€.

Scope: International. Entity where it is developed: UNESCO Sustainability Chair.

Funding entities: UPC's Centre for Development Cooperation; Ajuntament de Barcelona.

Green and Nature-Based Solutions for climate change-resilient waste infrastructures - LIFE20 CCA/ES/001795

Scientific coordinator: Morato, J..

Participants: Alvarez, J.; Perez, L.M.; Villanueva, B..

Date: 01/07/2021-31/12/2024. Duration: 03.06.00.

Funding: 1670765.0€.

Scope: European. Entity where it is developed: Centro Tecnológico AIMEN.

Funding entities: PROGRAMA LIFE DE LA COMISION EUROPEA; <https://lifegreenadapt.com/>

Itinerario académico para el reconocimiento de laboratorios locales de conflictividad y resiliencia climática en cinturones informales de Bogotá

Scientific coordinator: Morato, J..

Date: 01/01/2021-27/05/2022. Duration: 01.04.27.

Funding: 5000.0€.

Scope: International. Entity where it is developed: Codi 731 Òptica i Optometria OO.

Funding entities: UPC's Centre for Development Cooperation.

Estudio de la localización y disolución de productos de fisión y actínidos en el combustible nuclear

Scientific coordinator: De Pablo, J..

Participants: Casas, I.; Gimenez, F.; Garcia, S..

Date: 01/09/2021-31/08/2024. Duration: 03.00.00.

Funding: 72600.0€.

Scope: National. Entity where it is developed: Department of Chemical Engineering.

Funding entities: AGENCIA ESTATAL DE INVESTIGACIÓN.

Grup de Recerca en Ciència i Tecnologia de la Sostenibilitat

Scientific coordinator: Sureda, B..

Date: 01/01/2022-31/12/2024. Duration: 03.00.00.

Funding: 40000.0€.

Scope: Regional. Entity where it is developed: ENGINYERIA CIVIL I AMBIENTAL.

Funding entities: AGAUR. Agència de Gestió d'Ajuts Universitaris i de Recerca.

Continuació del projecte 2021-F003: Disseny i implementació d'una infraestructura digital per a la localitat de Gandiol

Scientific coordinator: Vidal, E..

Date: 01/06/2022-31/05/2023. Duration: 01.00.00.

Funding: 3000.0€.

Scope: International. Entity where it is developed: Codi 710 Eng.Electrònica EEL.

Funding entities: UPC's Centre for Development Cooperation.

Connecting St. John of God - Sierra Leone Part III

Scientific coordinator: Vidal, E.

Date: 01/06/2022-31/05/2023. Duration: 01.00.00.

Funding: 4000.0€.

Scope: International. Entity where it is developed: Codi 710 Eng.Electrònica EEL.

Funding entities: UPC's Centre for Development Cooperation.

Aules TIC a Ghana rural.

Scientific coordinator: Vidal, E.

Date: 01/06/2022-31/05/2023. Duration: 01.00.00.

Funding: 4000.0€.

Scope: International. Entity where it is developed: Codi 710 Eng.Electrònica EEL.

Funding entities: UPC's Centre for Development Cooperation.

Sensibilització i formació en països de baix IDH via TIC

Scientific coordinator: Vidal, E.. Participants: Navarro, L.; Roura, M..

Date: 01/01/2021-27/05/2022. Duration: 01.04.27.

Funding: 1500.0€.

Scope: International. Entity where it is developed: Codi 710 Eng.Electrònica EEL.

Funding entities: UPC's Centre for Development Cooperation.

Disseny i implementació d'una infraestructura digital per a la localitat de Gandiol

Scientific coordinator: Vidal, E..

Date: 01/01/2021-27/05/2022. Duration: 01.04.27.

Funding: 3254.0€.

Scope: International. Entity where it is developed: Codi 710 Eng.Electrònica EEL.

Funding entities: UPC's Centre for Development Cooperation.

Desenvolupament d'eines per al suport en l'implementació i en la gestió de la reutilització (SUGGEREIX)

Scientific coordinator: De Pablo, J..

Participants: Martí, V.

Date: 29/01/2020-28/04/2022. Duration: 02.03.00.

Funding: 9312.95€.

Scope: Regional. Entity where it is developed: Department of Chemical Engineering.

Funding entities: AGÈNCIA CATALANA DE L'AIGUA.

Ús eficient de recursos de rentat industrial

Scientific coordinator: De Pablo, J.

Date: 01/01/2020-31/12/2023. Duration: 04.00.00.

Funding: 33960.0€.

Scope: Regional. Entity where it is developed: Department of Chemical Engineering.

Funding entities: AGAUR. Agència de Gestió d'Ajuts Universitaris i de Recerca.

Digital Transport in and for Society - DIGNITY

Scientific coordinator: Roca, E..

Participants: Villares, M.; Garola, A.; Lazzarini, B..

Date: 01/01/2020-31/12/2022. Duration: 03.00.00.

Funding: 320869.8€.

Scope: European. Entity where it is developed: University Research Institute for Sustainability Science and Technology.

Funding entities: Commission of European Communities; <http://cordis.europa.eu/projects/875542>

Consulta Local para la Optimización de Políticas Territoriales sobre Energía Rural

Scientific coordinator: Rosas-Casals, M..

Participants: Borges, P.; Pages-Ramon, A..

Date: 01/10/2019-31/03/2023. Duration: 03.06.00.

Funding: 75101.4€.

Scope: European. Entity where it is developed: University Research Institute for Sustainability Science and Technology.

Funding entities: Commission of European Communities; <https://coleopter.eu/>

Soluciones basadas en la naturaleza para la gestión del agua en áreas periurbanas: Conectando las dimensiones ecológica, social y económica

Scientific coordinator: Roca, E..

Participants: Villares, M.; Ramírez-Agudelo, N.A.; Cruz, M..

Date: 01/04/2019-31/03/2023. Duration: 04.00.00.

Funding: 82500.0€.

Scope: National. Entity where it is developed: University Research Institute for Sustainability Science and Technology.

Funding entities: AGENCIA ESTATAL DE INVESTIGACIÓN

Integración de los objetivos para el desarrollo sostenible en la formación en sostenibilidad de las titulaciones universitarias españolas

Scientific coordinator: Sánchez-Carracedo, F.; Segalas, J..

Participants: Hernandez, M.; Gemma Tejedor; Climent, J.; Cabre, J.; Lopez, D.; Vidal, E.; Busquets, P.; Bueno, G.; Llinares, J.; Lafuente, M.; Limón, D.; Faura, Ú.; Barrón, À.; Sánchez, E.; Miñano, R.; Sáez de Cámara, E.; Gil, Ma D.; Valderrama, R.; Berbegal-Mirabent, J.; Román, S.; Sureda, B..

Date: 01/01/2019-31/12/2022. Duration: 04.00.00.

Funding: 58564.0€.

Scope: National. Entity where it is developed: University Research Institute for Sustainability Science and Technology.

Funding entities: AGENCIA ESTATAL DE INVESTIGACIÓN

Estudios de corrosión y disolución de análogos químicos del combustible nuclear gastado en las condiciones esperadas durante su almacenamiento

Scientific coordinator: De Pablo, J..

Participants: Casas, I.; Gimenez, F.; Garcia, S..

Date: 01/01/2018-30/09/2021. Duration: 03.09.00.

Funding: 74536.0€.

Scope: National. Entity where it is developed: Department of Chemical Engineering.

Funding entities: AGENCIA ESTATAL DE INVESTIGACIÓN

PECT LITORAL BESÒS TERRITORI SOSTENIBLE

Scientific coordinator: De Pablo, J..

Participants: Darbra, R.M.; Martí, V.; Valderrama, C.; Gibert, O.; Cortina, J.; Gimenez, F.; Gomariz, S.; Del Rio, J.; Cadena-Muñoz, F.J.; Artero, C.; Martinez, E.; Nogueras, M.

Date: 01/07/2017-31/12/2021. Duration: 04.06.00.

Funding: 143609.79€.

Scope: Regional. Entity where it is developed: Department of Chemical Engineering.

Funding entities: GENCAT-DEP.GOVERN.I ADMIN.PÚBLIQUES.

Modern spent fuel dissolution and chemistry in failed container conditions

Scientific coordinator: De Pablo, J..

Participants: Casas, I..

Date: 01/06/2017-30/11/2021. Duration: 04.06.00.

Funding: 25937.5€.

Scope: European. Entity where it is developed: Department of Chemical Engineering.

Funding entities: Commission of European Communities; <http://cordis.europa.eu/projects/755443>

RYC-2015-17367

Scientific coordinator: Josa, A.; Baiges, J.

Date: 01/12/2016-30/11/2021. Duration: 05.00.00.

Funding: 40000.0€.

Scope: National. Entity where it is developed: ENGINYERIA CIVIL I AMBIENTAL.

Funding entities: MIN DE ECONOMIA Y COMPETITIVIDAD.

Participation in a non-competitive R&D project

Contrato de colaboración de apoyo técnico PVH

Scientific coordinator: Alvarez, J..

Date: 23/02/2022-02/03/2022. Duration: 00.00.08.

Funding: 11967.5€.

Scope: National. Entity where it is developed: Department of Mechanical Engineering.

Funding entities: PV HARDWARE SOLUTIONS SL.

Estudi eficiència energètica edificis Euskadi

Scientific coordinator: Cuchi, A.

Date: 21/07/2022-31/12/2023. Duration: 01.05.11.

Funding: 200000.0€.

Scope: National. Entity where it is developed: TECNOLOGIA DE L'ARQUITECTURA.

Funding entities: ADM. GENERAL O ADM. DE LA COMUNIDAD.

Donació pel curs ACAI-2022

Scientific coordinator: Gibert, Karina.

Date: 23/04/2022-31/12/2022. Duration: 00.08.09.

Funding: 3000.0€.

Scope: Regional. Entity where it is developed: Centre Específic de Recerca Intelligent Data Science and Artificial Intelligence.

Funding entities: CENTRE DE VISIO PER COMPUTADOR

Donació pel curs ACAI-2022

Scientific coordinator: Gibert, Karina.

Date: 23/04/2022-31/12/2022. Duration: 00.08.09.

Funding: 9000.0€.

Scope: International. Entity where it is developed: Centre Específic de Recerca Intelligent Data Science and Artificial Intelligence.

Funding entities: Artificial Intelligence Journal.

Donació pel congrés ACAI-2022

Scientific coordinator: Gibert, Karina.

Date: 23/04/2022-31/12/2022. Duration: 00.08.09.

Funding: 12500.0€.

Scope: International. Entity where it is developed: Centre Específic de Recerca Intelligent Data Science and Artificial Intelligence.

Funding entities: EurAI.

Top Rosies Talent

Scientific coordinator: Gibert, Karina.

Participants: Vilaplana, V.; Belen Alastruey; Català Roig, N.; Nebot, A.; Arias, M.

Date: 01/01/2022-01/03/2023. Duration: 01.02.01.

Funding: 20000.0€.

Scope: Regional. Entity where it is developed: Universitat Politècnica de Catalunya.

Funding entities: DIGITAL FUTURE SOCIETY; HP Printing and Computing Solutions, S.L.U .

Estudi de seguretat d'un fàrmac

Scientific coordinator: Gibert, Karina.

Date: 27/09/2021-31/12/2023. Duration: 02.03.05.

Funding: 24525.0€.

Scope: Regional. Entity where it is developed: Department of Statistics and Operations Research.

Funding entities: FERRER INTERNACIONAL,S.A.

AI for Tourism.

Scientific coordinator: Gibert, Karina.

Date: 01/06/2021-01/03/2023. Duration: 01.09.01.

Scope: National. Entity where it is developed: Universitat Politècnica de Catalunya.

Funding entities: Centre of Innovation for Datatech and Artificial Intelligence.

Desenvolupament d'un curs digital sobre IA per a la ciutadania en general de difusió massiva en la societat catalana

Scientific coordinator: Gibert, Karina. Participants: Nebot, A..

Date: 01/02/2021-31/01/2024. Duration: 03.00.00. Funding: 172544.0€. Scope: Regional. Entity

where it is developed: Centre Específic de Recerca Intelligent Data Science and Artificial

Intelligence. Funding entities: FUNDACIÓ i2CAT.

Digitalization on Power Generation in the field of Data Analytics and Artificial Intelligence, para la aplicació industrial de tècniques de IA a la producció i gestió de turbinas de gas.

Scientific coordinator: Gibert, Karina.

Date: 01/06/2019-31/12/2021. Duration: 02.07.00.

Funding: 510000.0€.

Scope: National. Entity where it is developed: Universitat Politècnica de Catalunya.

Funding entities: Siemens.

Alianzas para la Emergencia Climática y Sanitaria del Valle de Aburra

Scientific coordinator: Morato, J.; Penagos, G.; Sanchez, O.; Villanueva, B.; Díaz, L.; Perez, L.M.; Alvarez, J.; López, D..

Date: 01/11/2021-31/10/2023. Duration: 02.00.00.

Funding: 152092.0€.

Scope: International. Entity where it is developed: UNESCO Sustainability Chair.

Funding entities: Ajuntament de Barcelona.

Alianzas para la Emergencia Climática y Sanitaria del Valle De Aburra

Scientific coordinator: Morato, J.; Penagos, G.; Sanchez, O.; Villanueva, B.; Diaz, L.; Perez, L.M.; López, D.; Alvarez, J..

Date: 01/11/2021-31/10/2023. Duration: 02.00.00.

Funding: 152092.0€.

Scope: International. Entity where it is developed: UNESCO Sustainability Chair.

Funding entities: Ajuntament de Barcelona.

Llibre blanc sobre la Intel·ligència Artificial aplicada a les indústries culturals i basades en l'experiència

Scientific coordinator: Nebot, A.; Paz, A.; Gibert, Karina.

Date: 01/01/2021-01/04/2022. Duration: 01.03.01.

Scope: Regional. Entity where it is developed: IDEAI-UPC - Intelligent Data sciEnce and Artificial Intelligence Research Group.

Funding entities: Centre of Innovation for Data tech and Artificial Intelligence.

Estudi dels sòls de la parcel·la de Tersa i dels principals contaminants presents, estudi d'escòries, revisió dels estudis realitzats i anàlisi comparatiu amb els sòls del territori

Scientific coordinator: De Pablo, J..

Date: 10/09/2021-25/10/2021. Duration: 00.01.16.

Funding: 13825.0€.

Scope: Regional. Entity where it is developed: Department of Chemical Engineering.

Funding entities: TERSA, TRACTAMENT SELECC.RESIDUS SA.

Ampliació del contracte de col·laboració per el desenvolupament d'un estudi sobre la resiliència territorial

Scientific coordinator: Roca, E..

Date: 09/11/2021-15/07/2022. Duration: 00.08.07.

Funding: 23634.0€.

Scope: Regional. Entity where it is developed: University Research Institute for Sustainability Science and Technology.

Funding entities: CENTRE INTERNACIONAL DE METODES NUM.

Instructional design – Teacher Training programmes: Challenge-Based Learning

Scientific coordinator: Segalas, J..

Participants: Gemma Tejedor.

Date: 01/01/2021-31/12/2022. Duration: 02.00.00.

Funding: 34125.0€.

Scope: International. Entity where it is developed: University Research Institute for Sustainability Science and Technology.

Funding entities: EUROPEAN INST OF INNOV.& TECHNOL.

Caracterización y estudio de análogos químicos del combustible nuclear irradiado (SNF) en las condiciones esperadas en un almacenamiento definitivo, en condiciones reductoras y parcialmente oxidantes

Scientific coordinator: De Pablo, J..

Date: 01/07/2020-31/12/2023. Duration: 03.06.00.

Funding: 222000.0€.

Scope: National. Entity where it is developed: Department of Chemical Engineering.

Funding entities: ENRESA.

Según Convenio Marco, establecer los honorarios relativos al asesoramiento, soporte académico y cualquier otra actividad que implique remuneración, que de común acuerdo se establecen entre el COACádiz

Scientific coordinator: Cuchi, A..

Date: 20/02/2019-16/02/2026. Duration: 06.11.28.

Funding: 27000.0€.

Scope: National. Entity where it is developed: TECNOLOGIA DE L'ARQUITECTURA.

Funding entities: COLEGIO OFICIAL ARQUITECTOS-CÁDIZ.

Cofinançament PECT Besòs - operació Recerca per la Sostenibilitat

Scientific coordinator: De Pablo, J..

Date: 31/01/2019-31/12/2021. Duration: 02.11.01.

Funding: 71804.89€.

Scope: Regional. Entity where it is developed: Department of Chemical Engineering.

Funding entities: Diputació de Barcelona.

Cotitularitat tesi doctoral Ontology based semantic clustering

Scientific coordinator: Gibert, Karina.

Date: 14/02/2011-28/02/2031. Duration: 20.00.15.

Scope: Regional. Entity where it is developed: Department of Statistics and Operations Research.

Funding entities: UNIVERSITAT ROVIRA I VIRGILI.

5. TEACHING

5.1. MASTER'S DEGREE IN SUSTAINABILITY SCIENCE AND TECHNOLOGY

The master's degree in Sustainability Science and Technology aims to provide students with advanced interdisciplinary training to help them understand the interactions between society, the economy, and the environment. Graduates will also have a sound understanding of scientific and technical options and trends for tackling key challenges for the sustainable development of current socio-environmental systems.

The course will train students to become entrepreneurs and agents of change in the field of sustainable development. Based on their specialisation in areas related to biodiversity, the environment, the built environment, services, the production system and information management, graduates will be able to design, implement and evaluate sustainable solutions in different fields of engineering and technology. They will work in various cultural and professional contexts, applying a transdisciplinary approach based on scientific and technical rigour.

This master's degree has received the International Master's Programme distinction (2013 call) awarded by the Government of Catalonia's Agency for the Management of University and Research Grants (AGAUR).

The Master in Sustainability Science and Technology was validated by the Universities Council's Curriculum Validation and Accreditation Committee in July 2013.

Courses offered in academic year 2021-2022:

Mandatory Courses

Code	Subject	Professor
480011	Fundamentals of Economics, Environmental Economics and Ecological Economics	José María Gil
480012	Fundamentals of Engineering, Sustainability and Development	Bàrbara Sureda
480021	Fundamentals of Mathematical and Systemic Sustainability Modelling ^[1]	Martí Rosas
480022	Fundamentals of Applied Statistics and Sustainability and Development Measurement	Karina Gibert
480041	Fundamentals of Social Sciences and Approaches to Socio-Environmental Conflicts	Míriam Villares
480042	Research-Action Workshop on Sustainability Science and Technologies ^[1]	Jordi Segalas
480051	Fundamentals of Geosciences and Geographic Information Systems	Xavier Sánchez
480031	Fundamentals of Ethics, Business, and Innovation	Alvar Garola
480032	Fundamentals of Sustainable Management and Environmental Management Systems	María Gonçalves
480074	Transdisciplinary and Social Research	Elisabet Roca

Elective courses

Code	Subject	Professor
480081	Urban Metabolism and Ecological Urbanism ^[1]	Josep Mercadé
480093	Socio-Environmental Data Science ^[1]	Karina Gibert
480111	Integral Management of Urban and Ecological Water Cycles	Joan de Pablo
480072	Climate Change Mitigation Policies	Olga Alcaraz
480071	Biodiversity and Socio-Ecological Systems ^[1]	Jordi Morató
480076	Sustainable Management of Energy Resources and the Need for a New Energy Model	José López
480152	Sustainable Design of Products and Services ^[1]	Jordi Segalas
480075	Intelligent Sustainability Decision Support Systems ^[1]	Miquel Sanchez-Marré
480083	Territorial Metabolism and Transport Infrastructures	Francesc Magrinyà
480091	Information and Communication Technologies	Eva Vidal
480092	Industrial Ecology	Gemma Cervantes
480152	Sustainable Design of Products and Services ^[1]	Jordi Segalas
480171	Complex and Socio-Environmental Networks ^[1]	Martí Rosas
480521	International Cooperation for Development	Alvar Garola
480511	Urban and Regional Development ^[1]	Francesc Magrinyà
480602	Construction and Building Engineering and Technologies ^[1]	Miren Etxeberria
480073	Energy Economics and Sustainable Energy Systems ^[1]	Elena Martin

[1] Subjects taught in English Language. Exams can be taken in Catalan, Spanish or English

Defended Master Theses

Replantació de Posidònia Oceànica a Catalunya: Estudi d'una Estratègia de Mitigació i Adaptació al Canvi Climàtic	2022-07-20
Systematization and evaluation of the mid-century long-term low GHG emission development strategies	2022-06
Estudio de la brecha digital en el sector de la movilidad. Una aproximación cuantitativa en el contexto europeo	2022-07-20
Fostering co-creation tools for more inclusive digital mobility services: The DIGNITY Toolkit	2022-06-29
Binder Jet parts recycling study	2022-07-14
Aproximació a la freqüentació induïda dels Parcs Naturals de l'Alt Empordà. Proposta de gestió i monitoratge	2022-06
Food loss and waste along the zucchini value chain in Catalonia: quantification, causes and prevention	2022-07-18
La petjada de carboni de la mobilitat internacional a la UPC	2022-07-20
Climate change and environmental data science study	2021-10-15

Design of the 2019 Solar PV Auctions of Portugal: Analysis of the auction data and finance	2021-10-15
Evaluación de recintos deportivos pertenecientes al Instituto Nacional del Deporte en la región de Coquimbo. Alternativas para un desarrollo sostenible	2021-10
Soluciones basadas en la naturaleza para la gestión sostenible del agua en América Latina y el Caribe	2021-10-05
Clean cooking transition in Nepal: a geospatial analysis of the social and environmental impacts	2021-09
El Glasgow Agreement: una iniciativa de la sociedad civil comprometida con la Justicia Climática	2021-09-15
Assessing sustainability and SDGs in Engineering Education	2021-10-01

5.2. DOCTORAL PROGRAM IN SUSTAINABILITY

Sustainability research involves specialists from different origins and backgrounds with a variety of disciplinary perspectives but with the common will to contribute to the development of society by providing future generations with the options and skills required to forge their own path.

The doctoral programme in Sustainability encompasses the research and courses that deal with the current challenges to sustainability: exhaustion, distribution and management of natural resources, including energy and water; climate change impacts and adaptation and mitigation mechanisms; modelling of socio-environmental systems and assessment of their evolution and development; poverty and imbalances in urban and rural environments; technological innovation and integrated concepts in construction, architecture and management of public services and the environment; and preservation and promotion of environmental and cultural heritage.

Sustainability science and technology is a highly interdisciplinary field of research that offers the opportunity to make original contributions in understanding and solving problems that affect the welfare and development of peoples and societies, and in shaping a new perspective from which to analyse our reality, integrating approaches from different disciplines and embracing the very agents of change.

This programme, in which highly diverse research lines and fields of interest converge, may benefit from cross-disciplinary exchange between the different research lines. For this reason, in addition to the activities in which each research group is involved, a framework for discussion of research in progress is provided in the form of the Research Monitoring and Support Working Session. This session is held every academic year and is open to all doctoral candidates and lecturers who are interested in sustainability science and technology.

This PhD therefore, is open to professionals and researchers with the will and capacity to face these challenges and provide solutions through academic contributions of international impact.

The doctoral programme in Sustainability was validated by the Universities Council's Curriculum Validation and Accreditation Committee, in accordance with the provisions of Royal Decree 99/2011, of 28 January, regulating official doctoral studies. The first academic year under Royal Decree 99/2011 was 2013-14.

PhD in Sustainability – Facts & Figures 2021-22

Access and enrolment	
New doctoral students	22
Total students	93
Research plans defended	20
Read doctoral thesis	9

Defended PhD Thesis

Azarkamand, Sahar

Thesis title: Development of a standardised tool to calculate carbon footprint in ports.

Supervisor: Darbra Roman, Rosa Maria

Reading date: 04/11/2021

Gómez Hernández, Dorian Francisco

Thesis title: Evaluation of rural electrification plans and planning proposal with technical and social criteria.

Supervisor: Ferrer Martí, Laia

Reading date: 18/11/2021

Chams, Nour

Thesis title: Assessment of the societal impact of research and innovation in the agri-food sector.

Supervisor: Gil Roig, José María

Reading date: 26/11/2021

Miranda Briones, Ricardo

Thesis title: Reconstrucción de la variabilidad climática para el oeste de Chihuahua, México, empleando un enfoque dendrocronológico.

Supervisor: Morato Farreras, Jordi
 Cerano Paredes, Julian

Reading date: 01/12/2021

Ramirez Agudelo, Nancy Andrea

Thesis title: Nature-based solutions for waterfronts reconfigurations: Litoral Besòs, analysis of an urban sustainability transition in the Barcelona metropolitan area.

Supervisor: Roca Bosch, Elisabet
Pablo Ribas, Joan de

Reading date: 01/07/2022

Pejman, Niloofar

Thesis title: Animal welfare in Europe and Iran: policy perspective and society.

Supervisor: Kallas, Zein

Reading date: 10/03/2022

Guadarrama Fuentes, Omar Vicente

Thesis title: Un enfoque holístico para evaluar la Sostenibilidad de las Indicaciones Geográficas : una aplicación a las DOP de aceite en Cataluña .

Supervisor: Gil Roig, José María

Reading date: 01/06/2022

Baltà Salvador, Rosó

Thesis title: L'experiència acadèmica i el benestar de l'estudiantat en situació de risc en estudis STEM.

Supervisor: Olmedo Torre, Noelia

Reading date: 29/06/2022

López Díaz, María Teresa

Thesis title: Contextualización de la enseñanza de las matemáticas en las carreras tecnológicas.

Supervisor: Peña Carrera, Marta

Reading date: 22/07/2022

Defended Research Plans

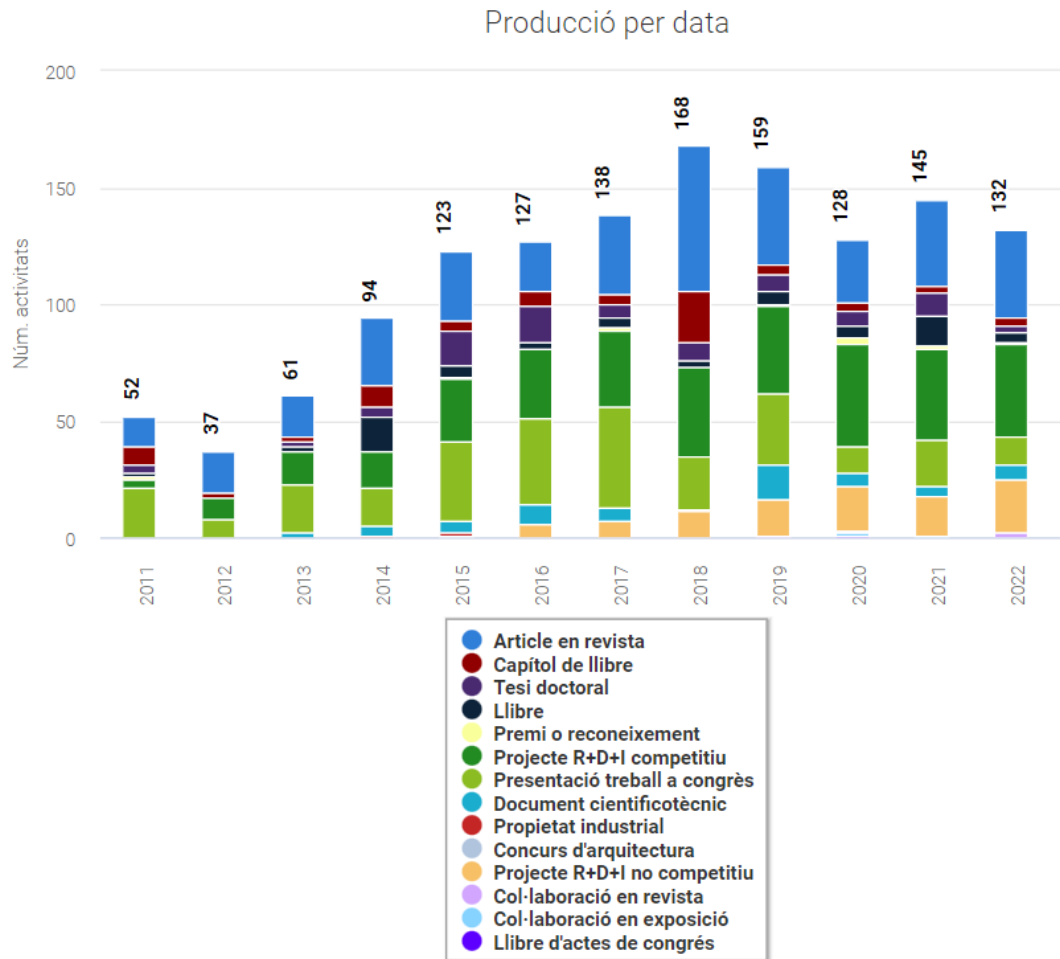
Student	Director
February 2022	
ANDREU FALGUERAS	Pablo Pujadas / Francesc Pardo
RAUL COBO	José Juan de Felipe
ISMAIL EL MADAFRI	Marta Peña
FELIX ARAYA	Jordi Segalàs / Lázaro Cremades
NA LIANG	Jordi Segalàs
ANGELA ADAMO	M. Elena Martín Cañadas / Jordi de la Hoz
BARTOSZ MACIEJ WYBRANIEC	Eli Roca
CRUZ VELÁZQUEZ, CAROLINA	Miguel Mayorga
GALASSI, ANDREA	Dolores del Castillo
June 2022	
ESQUIU, ANNA MARIA	Beatriz Amante / Águeda Carrillo
CEBRIÁN MACÍAS, MIREIA	Enric Trullols / Josep Maria Monguet
FALLAH DOOST, AHMAD	Ricard Bosch
ZARATE VARGAS, ARIEL	Francesc Pardo / Pablo Pujades
CURTÓ PAGÈS, FERRAN	Francesc Pardo / Angel Castañeira
SÁNCHEZ RUIZ, EDUARDO ALONSO	Lázaro Cremades
VALMAÑANA RODRIGUEZ, JOAQUIM	Elisabeth Gonzalez / Manuel Rajadell
CRUZ VELÁZQUEZ, CAROLINA	Miguel Mayorga
GARCIA CÉSPEDES, JORDI	José Juan de Felipe
MEHABA, WAFA	José María Gil
ROJAS, JOANTAN EDWARD	José María Gil

6. PUBLICATIONS

6.1. SCIENTIFIC PRODUCTION

The research activities and production of IS.UPC members are included in the following link:

<https://futur.upc.edu/IS.UPC>



7. ACTIVITIES

7.1. WORKSHOPS AND OUTREACH ACTIVITIES

Campanya: L'Hidrogen no pot ser l'única solució

Participants: ODG, ISST-UPC, Alumnat MCST

Date: 28/11/2021

Web: <https://odg.cat/publicacio/hidrogen-no-pot-ser-lunica-solucio/>

Entrevistes a la COP26

Participants: Olga Alcaraz, Alumnat MCTS

Date: 02/11/2021

Web: https://www.ccma.cat/tv3/alacarta/telenoticies/telenoticies-vespre-02112021/video/6127403/?ext=SMA_WP_F4_CE24

Workshop: Estratègies per una Mobilitat Activa a la Garrotxa

Place: UPC Campus Nord

Participants: Universitat Politècnica de Catalunya, Grup Exit, IntraScapeLab

Date: 28/06/2021 – 08/07/2021

Professora del IS.UPC ha presentat els darrers resultats del projecte DIGNITY

Place: Smart City Expo de Barcelona

Participants: Elisabet Roca

Date: 24/11/2021

Estudiant del MCTS parla a UPCTalks pels ODS: Compromís Social

Participants: Daniel Muñoz

Place: Auditori de l'edifici Vèrtex, Barcelona

Date: 23/11/2021

Sessió informativa del postgrau en Economia Circular. Eines i Estratègies d'Innovació Industrial

Participants: Institute for Sustainability Science and Technology (IS.UPC)

Date: 25/01/2022

Seminary obert en Engineering education for sustainability amb participació del ISST

Participants: Institute for Sustainability Science and Technology (IS.UPC), European Society for Engineering Education

Date: 18/01/2022

Web: <https://www.sefi.be/2021/11/08/engineering-education-for-sustainability/>

Profesora de l'institut ha participat en les jornades door-to-door mobility

Participants: Elisabet Roca, Centre d'Innovació y Tecnología (CIT), IN-MOVE

Place: Casa Seat, Barcelona

Date: 31/05/2022

Web: <https://cit.upc.edu/es/jornadadoortodoormobility/>

7.2. WORK PRESENTED AT A CONFERENCE

Designing an assessment methodology and tool for circular economy academic projects

20th European Roundtable for Sustainable Consumption and Production.

Participants: Asua, J.; Segalas, J.; Valderrama, C..

Date: 09/2021.

Web: <https://openlib.tugraz.at/download.php?id=6135ff32d065f&location=browse>.

Automatic predictor of diabetes mellitus, type I and gestational, using machine learning techniques

24th International Conference on Computational Statistics.

Participants: Borja, R.; Monleon, A.; Gibert, Karina; Robalino, G.; Borja, B.; Buelvas, J.; Lopez, R.; Serrano, C..

Date: 25/08/2022.

Web: <http://www.cmstatistics.org/RegistrationsV2/COMPSTAT2022/viewSubmission.php?in=526&token=rqq95nq01773r64185p84s0o292pno20>.

Assessing SDGs' learning objectives in Engineering Education. Case study Engineering in Industrial Design and Product Development at UPC Barcelona Tech

49th Annual Conference of the European Society for Engineering Education.

Participants: Garcia, V.; Segalas, J.

Date: 13/09/2021.

Web: <https://www.sefi.be/wp-content/uploads/2021/12/SEFI49th-Proceedings-final.pdf>.

An analysis of the sustainability in the engineering degree in industrial design and product development

20th European Roundtable for Sustainable Consumption and Production.

Participants: Galofré, V.G.; Segalas, J..

Date: 09/2021.

Web: <https://diglib.tugraz.at/download.php?id=612dfa88c5513&location=browse>.

Assessing SDGs' learning objectives in Engineering Education. Case study Engineering in Industrial Design and Product Development at UPC Barcelona Tech

49th European Society for Engineering Education Annual Conference.

Participants: Garcia, V.; Segalas, J..

Date: 13/09/2021.

Web: <https://www.sefi.be/wp-content/uploads/2021/12/SEFI49th-Proceedings-final.pdf>.

Open data and experimental data source combination's impact on underground water analysis in Isla Margarita – Venezuela

XIX Conferencia de la Asociación Española para la Inteligencia Artificial.

Participants: Gibert, Karina; Conti, D.; Arregui, Í..

Date: 22/09/2021.

Evaluating the impact of the COVID19 in mental health in people with social vulnerability through INSESS-COVID19 technology

25th International Scientific Symposium on Biometrics.

Participants: Gibert, Karina; Angerri Torredelot, Xavier.

Date: 08/10/2021.

Web: <https://www.hbmd.hr/program-biostat2021>.

A common formal framework for factorial and probabilistic topic modelling techniques

23rd International Conference of the Catalan Association for Artificial Intelligence.

Participants: Hernández, Y.; Gibert, Karina.

Date: 20/10/2021.

Sustainable and inclusive digital mobility services in times of Covid: a case study of Barcelona

20th European Roundtable for Sustainable Consumption and Production.

Participants: Lazzarini, B.; Bartosz W.; Villares, M.; Garola, A.; Roca, E..

Date: 08/09/2021.

Web: <https://www.tugraz-verlag.at/gesamtverzeichnis/unkategorisiert/proceedings-of-the-20th-european-roundtable-on-sustainable-consumption-and-production-ebook/>.

Constructed wetlands for the treatment of wastewater in small cities on the peruvian coast

4th Smallwat.

Participants: Leon, V.; Pastor, R.; Rosado, X.; Miglio, R.; Morato, J..

Date: 18/07/2021.

Efectos de la COVID19: de la 'docencia remota de emergencia' a la 'presencialidad adaptada'

Congreso Internacional de Enseñanza Universitaria.

Participants: Llorens, F.; Sánchez-Carracedo, F.; Lopez, D.; Badía, J.; Marco, M..

Date: 20/05/2022.

A compositional approach to the development of personas for the study of digital mobility

9th International Workshop on Compositional Data Analysis.

Participants: Ortego, M.I.; Bartosz W.; Roca, E..

Date: 28/06/2022.

Desarrollo de personas para el estudio de las necesidades en movilidad digital: el caso del Área Metropolitana de Barcelona en el proyecto DIGNITY

XXXIX Congreso Nacional de Estadística e Investigación Operativa.

Participants: Ortego, M.I.; Bartosz W.; Roca, E..

Date: 07/06/2022.

Web: https://www.ugr.es/~organizador.seio2022/Actas_SEIO2022.pdf.

Urban sustainability accounts : reconfiguration of brownfield redevelopment in Barcelona Metropolitan Area

IOER Annual Conference 2021.

Participants: Ramírez-Agudelo, N.A.; Roca, E..

Date: 24/09/2021.

El fomento de la empatía en alumnos de 2do de secundaria mediante la metodología aprendizaje basado en problemas

CIENU -Congreso Internacional de Enseñanza Universitaria.
Participants: Ramírez-Hermosillo, D.; Sánchez-Carracedo, F..
Date: 20/05/2022.

Distribución justa de emisiones para alcanzar el objetivo de temperatura de los 1.5°C en los países de América Latina

5º Coloquio Estudiantil, Calentamiento Global ¿Y las Ciencias Ambientales?.
Participants: Ramírez, C.; Alcaraz, O.; Sureda, B..
Date: 24/11/2021.

Integrating Sustainability and Social Commitment (S&SC) competences in the curriculum at the Barcelona School of Civil Engineering

50th Annual Conference of the European Society for Engineering Education.
Participants: Roca, E.; Real, E.; Ferrer, I..
Date: 19/09/2022.
Web: <https://www.upc.edu/ice/ca/ebook-sefi-2022-1.pdf/>.

Promoting digital inclusion in modern transport systems: the management and use of data in the H2020 DIGNITY project.

Research Café 5: Research Data (12th May 2022).
Participants: Roca, E.; Lazzarini, B..
Date: 12/05/2022.

El proyecto DIGNITY: hacia un sistema de movilidad digital inclusivo en el Área Metropolitana de Barcelona

XIV Congreso de Ingeniería del Transporte: R-evolucionando el Transporte.
Participants: Roca, E.; Bartosz W.; Lazzarini, B.; Villares, M.; Garola, A..
Date: 08/07/2021.
Web: <https://www.ubu.es/catalogo-de-publicaciones/r-evolucionando-el-transporte>.

Tools for embedding and assessing sustainable development goals in engineering education

XXVIII Jornadas sobre la Enseñanza Universitaria de la Informática.

Participants: Sánchez-Carracedo, F.; Segalas, J.; Busquets, P.; Climent, J.; Galofré, V.G.; Lazzarini, B.; Lopez, D.; Martin, C.; Sureda, B.; Gemma Tejedor; Vidal, E.; Bueno, G.; Sáez de Cámara, E.; Miñano, R..

Date: 07/07/2022.

Web: https://aenui.org/actas/pdf/JENUI_2022_057.pdf

Circular conference toolkit. Case study ERSCP 2019 conference

20th European Roundtable for Sustainable Consumption and Production.

Participants: Santamaria, M.; Segalas, J.; Galofré, V.G..

Date: 09/2021.

Web: <https://openlib.tugraz.at/download.php?id=6137171e448bc&location=browse>.

Education for sustainable development in higher education institutions

5th World Symposium on Sustainable Development at Universities.

Participants: Gemma Tejedor; Sánchez-Carracedo, F.; Segalas, J..

Date: 18/06/2022.

Analysis of the social and institutional adaptive capacity to climate change in the Catalan coastline

9th International Symposium Monitoring of Mediterranean Coastal Areas: Problems and Measurement Techniques.

Villares, M.; Roca, E.; Porcar, R..

Date: 14/06/2022.

Web: http://sympcoastmed.fi.ibimet.cnr.it/wp-content/uploads/2022/06/VolumeAbstractsPART1_rev.pdf.

El cambio climático en el litoral catalán: capacidad de adaptación [sic] social e institucional

XVI Jornadas Españolas de Ingeniería de Costas y Puertos.

Participants: Villares, M.; Roca, E..

Date: 11/05/2022.

Web: <https://costasypuertos2022.com/sites/default/files/LIBRO%20FINAL%20Resumenes%20Costas%20y%20Puertos%202022%20pdf.pdf>.

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23rd edition of the International Conference of the Catalan Association for Artificial Intelligence.

Participants: Suman, S.; Karna, A.; Gibert, Karina.

Date: 20/10/2021.

Web: <https://ebooks.iospress.nl/volumearticle/57718>.

Visual mining of industrial gas turbines sensor data as an industry 4.0 application

16th International Conference on Soft Computing Models in Industrial and Environmental Applications.

Participants: Astudillo, A.; Rosso, S.; Gibert, Karina; Vellido, A..

Date: 2021.

Web: https://link.springer.com/chapter/10.1007/978-3-030-87869-6_10.

8. ANNEX

Academics with formal adscription to IS.UPC and research activity related:

- Alcaraz Sendra, Olga (<https://futur.upc.edu/OlgaAlcarazSendra>)
- Àlvarez del Castillo, Javier (<https://futur.upc.edu/JavierAlvarezDelCastillo>)
- Claret Roca Rosell, Antoni-Maria (<https://futur.upc.edu/AntonimariaClaretRocaRosell>)
- Climent Vilaro, Juan (<https://futur.upc.edu/JuanClimentVilaro>)
- Cuchi Burgos, Alberto (<https://futur.upc.edu/AlbertoCuchiBurgos>)
- De Pablo Ribas, Joan (<https://futur.upc.edu/JoandePabloRibas>)
- Garola Crespo, Àlvar (<https://futur.upc.edu/AlvaroGarolaCrespo>)
- Gibert Oliveras, Karina (<https://futur.upc.edu/karinaGibert>)
- Magrinyà Torner, Francesc (<https://futur.upc.edu/FrancescMagrinyaTorner>)
- Martin Escofet, Carme (<https://futur.upc.edu/CarmeMartinEscofet>)
- Morató Farreras, Jordi (<https://futur.upc.edu/JordiMoratoFarreras>)
- Ribas Romeva, Carles (<https://futur.upc.edu/CarlesRibaRomeva>)
- Roca Bosch, Elisabet (<https://futur.upc.edu/ElisabetRocaBosch>)
- Rosas Casals, Martí (<https://futur.upc.edu/MartiRosasCasals>)
- Sánchez Carracedo, Fermín (<https://futur.upc.edu/FerminSanchezCarracedo>)
- Segalàs Coral, Jordi (<https://futur.upc.edu/JordiSegalasCoral>)
- Sureda Carbonell, Bàrbara (<https://futur.upc.edu/BarbaraSuredaCarbonell>)
- Trullols Farreny, Enric (<https://futur.upc.edu/EnricTrullolsFarreny>)
- Vidal Lopez, Eva (<https://futur.upc.edu/EvaMariaVidalLopez>)
- Villares Junyent, Míriam (<https://futur.upc.edu/MiriamVillaresJunyent>)