

Hours given in Central Eastern Time (UTC+1)

All presentations will have face-to-face and remote attendance possibilities

**First Day: Monday the 5th of July 2021. Master Theses**

Auditorium 03 (rue de Houdain)

09:00	09:30	Welcome speeches. Prof C Renotte (Dean of the Faculty of Engineering of UMONS) Prof P Dehombreux (Head of International Relations at the Faculty of Engineering of UMONS) Prof P Lybaert (SMACCs coordinator)
09:30	10:00	Master Thesis presentation <b>Yelizaveta Al-Dara, <i>Electricity usage recommender system with limited input data</i></b> Supervisors: C. Tjortjis (IHU), Z. De Grève (UMONS), T. Piraut (WeSmart) Reviewer: F. Lecron (UMONS)
10:00	10:30	Master Thesis presentation <b>Masum Ahmed, <i>Current sensor fault-tolerant control of a grid-connected three-phase inverter</i></b> Supervisor: O. Deblecker (UMONS) Reviewer: M. Pozzi (HWU)
10:30	11:00	Coffee break
11:00	11:30	Master Thesis presentation <b>Juan Alfau, <i>Reinforcement learning for improving the operation of Renewable Energy Communities</i></b> Supervisors: J-F Toubeau (UMONS), Z. De Grève (UMONS) Reviewer: C. Berberidis (IHU)
11:30	12:00	Master Thesis presentation <b>Paulina Fiscal, <i>Smart cities' strategies to ameliorate environmental impacts of rapid urbanization in Beijing, China</i></b> Supervisors: S. Koutra (UMONS), X. ZHANG (China University of Mining and Technology) Reviewer: L. Del Portillo (UPV/EHU)
12:00	13:30	LUNCH
13:30	14:00	Master Thesis presentation <b>Oleksandr Husiev, <i>Analysis of a new District Heating Network for an existing neighbourhood under a cost-effectivity perspective</i></b> Supervisors: A. Campos (UPV/EHU), J. Terés (UPV/EHU) Reviewer: E. Dumont (UMONS)
14:00	14:30	Master Thesis presentation <b>Bekbol Ismagulov, <i>Analysis of imputation methods for data gaps in high resolution energy smart meters in buildings</i></b> Supervisors: A. Erkoreka (UPV/EHU), V. Feldheim (UMONS), R. Garay (TECNALIA) Reviewer: D. Karapiperis (IHU)
14:30	15:00	Master Thesis presentation <b>Ruken Karakus, <i>Assessing the Impact of Occupant Behavior on Energy Consumption at Residential Buildings</i></b> Supervisors: X. Oregi (UPV/EHU), S. Koutra (UMONS) Reviewer: T. Lim (HWU)
15:00	15:30	Coffee break
15:30	16:00	Master Thesis presentation <b>Iuliia Maskova, <i>Modeling and Simulation of a Local Energy Community using the IES-ICL software. A techno-economic analysis</i></b> Supervisors: Z. De Grève (UMONS), J. Terés (UPV/EHU), R. Sterling (R2MSolutions) Reviewer: W. Fruh (HWU)
16:00	16:30	Master Thesis presentation <b>Moldir Mayligali, <i>Potential of occupancy prediction and zonal space heating controls in educational buildings for reducing energy consumption in buildings in temperate climates: a case study in Spain.</i></b>

	Supervisors: P. Chatzimisios (IHU), J. Terés (UPV/EHU) Reviewer: A. Campos (UPV/EHU)
16:30 17:00	Master Thesis presentation <b>Iruñe Minguez, <i>Estimation of the short-circuit contribution of distributed generation in modern transmission systems</i></b> Supervisors: F. Vallée (UMONS), J. Sprooten (ELIA) Reviewer: J. Swingler (HWU)

## Second Day: Tuesday the 6th of July 2021. Master Theses

Auditorium 03 (rue de Houdain)

09:00 09:30	Master Thesis presentation <b>Abdulrahman Mohammed, <i>Cost effectiveness analysis of ensuring ventilation rates to prevent COVID-19 propagation in a confined space</i></b> Supervisors: A. Campos (UPV/EHU) Reviewer: V. Feldheim (UMONS)
09:30 10:00	Master Thesis presentation <b>Kimji Pellano, <i>Analyzing the robustness of deep learning classifiers for traffic sign recognition systems</i></b> Supervisors: C. Berberidis (IHU), X. Siebert (UMONS) Reviewer: S. Dupont (UMONS)
10:00 10:30	Master Thesis presentation <b>Peter Pusztai, <i>The advantage of point-cloud derived tree modelling on urban greenery maintenance: Shortlisting dangerous trees, assessing ecosystem services</i></b> Supervisor: J. Terés (UMONS), A Borcs (GreeHill Solutions) Reviewer: C. Berberidis (IHU)
10:30 11:00	Coffee break
11:00 11:30	Master Thesis presentation <b>Sofia Rueda, <i>Study towards the development of Brussels North district Positive Energy District (PED)</i></b> Supervisor: X. Oregi (UPV/EHU), F. Zumbultas (City of Brussels, Smart City Office) Reviewer: S. Koutra (UMONS)
11:30 12:00	Master Thesis presentation <b>Shahin Sultana Eity, <i>Rickshaw in Europe: Prospect for Smart Cities and Communities</i></b> Supervisor: S. Koutra (UMONS), Z. De Grève (UMONS) Reviewer: J. Terés (UPV/EHU)
12:00 13:30	LUNCH
13:30 14:00	Master Thesis presentation <b>Bin Shamsuddin Syuqran Naim, <i>Big Data Mining for Smart Cities: Real Estate Price Prediction using Time-series Analysis</i></b> Supervisor: C. Tjortjis (IHU) Reviewer: J. Bottieau (UMONS)
14:00 14:30	Master Thesis presentation <b>Rallou Taratori, <i>Collaborative ecosystems for smart and sustainable development</i></b> Supervisor: S. Koutra (UMONS), M. Pareja-Eastaway (Universitat de Barcelona, CRIT Research Group) Reviewer: J. Terés (UPV/EHU)
14:30 15:00	Master Thesis presentation <b>Orestis Trasanidis, <i>Decision making tool for smart cities</i></b> Supervisor: C. Tjortjis (IHU), J. Tzanidaki (ERTICO ITS Europe) Reviewer: A. Erkoreka (UPV/EHU)
15:00 15:30	Coffee break
17:30 19:00	SMACCS Joint Programme Board Meeting (SMACCS JPB only)

### Third Day: Wednesday the 7th of July 2021. Visit

Visit of a Smart City/Smart District for the audience attending in F2F. More information coming soon.

18:00 19:30 **SMACCS Academic Committee meeting**

### Fourth Day: Thursday the 8th of July 2021. Seminars from guest lecturers

Auditorium 03 (rue de Houdain)

08:30 10:30	F2F seminar <b>Prof Guy De Weireld, <i>Carbon Capture, utilisation and storage</i></b> <b>UMONS, Dept of Thermodynamics and Mathematical Physics</b> <b>Abstract:</b> coming soon
10:30 11:00	Coffee break
11:00 12:00	Remote seminar <b>Dr Alvaro Campos, <i>Energy Communities: Towards the democratization of the energy system</i></b> <b>University of the Basque Country (UPV/EHU), Energy Engineering Department, ENEDI Research Group</b> <b>Abstract:</b> There is a wide consensus on the need of transitioning from fossil fuel towards renewable energy sources. As renewable energy technologies present specific characteristics that make them very different to the incumbent sources, far from a mere technology replacement, a window of opportunity is open towards a deeper transformation of the energy system. For that aim, aspects such as size, property and decision making are of great importance in order to assess the different alternative models that can be created from this opportunity. Thus, while the European energy agenda is prioritizing an energy transition agenda based on large RES megaprojects, we see how alternative concepts are being developed bottom-up, from municipal to grassroots initiatives. This seminar aims to explore this new ways of understanding energy transition, covering the strength and opportunities of this bet, as well as the main barriers and weaknesses that should be overcome to pass from playing a trivial to a main role in the future energy system.
12:00 13:30	LUNCH
13:30 15:30	<b>Intake 2 Master Theses pitches</b> Five minutes presentations by the Intake 2 students about their Master Thesis which will be developed next year. Detailed schedule coming soon.
15:30 16:00	Coffee break
16:00 17:00	Remote seminar <b>Prof Saraju Mohanty, <i>Title coming soon</i></b> <b>University of North Texas, Dept of Computer Science and Engineering</b> <b>Abstract:</b> coming soon
17:00 18:00	Remote seminar <b>Dr Alex MacLaren, <i>We can design an autonomous solar-powered House of the Future</i></b> <b>Heriot Watt University, School of Energy, Geoscience, Infrastructure and Society</b> <b>Abstract:</b> Heriot Watt University is the only UK university in the finals of the 'Solar Decathlon Middle East'- a global competition looking for innovation from students and industry and the cutting-edge of low-carbon design and smart technology- for houses to be built in the UAE (United Arab Emirates). Our student team, comprised of undergraduate, postgraduate and research students, has been designing this house for two years. The design incorporates PCM heat batteries, solar Bifacial PV, chilled ceilings, intelligent water use and recycling, and many other innovative solutions, all connected to a smart home technology system which responds digitally to climate and owner. Come and hear the students talk about the work they have done and where it has taken them. In December 2021 the house will be part of the international competition: and over the following months we'll be using it and the data from it as a 'living lab'- watch this space!
18:00 23:00	<b>Gala dinner (for F2F participants only)</b>

Subject to sanitary situation, more information coming soon

## Fifth Day: Friday the 9th of July 2021. Seminars from guest lecturers, Intake 1 ceremo

Auditorium 03 (rue de Houdain)

08:30	09:30	Remote seminar <b>Dr Aitor Urresti, <i>Energy transition in islands and isolated areas</i></b> <b>University of the Basque Country (UPV/EHU), Energy Engineering Department, ENEDI Research Group</b> <b>Abstract:</b> Power supply in islands and isolated areas is very different from that of the mainland. The small size of the area and its isolation, means that the main concerns of the power supply system are safety of supply and flexibility, while energy efficiency is placed on the background. This commonly implies that the power supply is based on small size power plants, that use fossil fuels. The supply of fossil fuels is also a big concern, not only for power generation, but also for other energy uses. The low efficiency of the power system, together with the high dependence on external supply, enforce the need for an energy transition in these areas, that will ensure a safer, more efficient and cleaner energy supply. In this seminar we will analyze the main characteristics of the energy system of islands and isolated areas, using the example of the Balearic Islands in Spain, and we will learn the main keys that can enhance and accelerate the energy transition in these areas.
09:30	10:30	Remote seminar <b>Dr Joanna Tzanidaki, <i>Urban Mobility - the future trends</i></b> <b>ERTICO - ITS Europe, Director Innovation and Deployment</b> <b>Abstract:</b> coming soon
10:30	11:00	Coffee break
11:00	12:00	Remote seminar <b>Prof Jakob Puchinger, <i>Title coming soon</i></b> <b>Anthropolis Chair Holder, Senior Scientist at IRT-SystemX, Professor at Centrale Supélec Université Paris-Saclay</b> <b>Abstract:</b> coming soon
12:00	13:30	LUNCH
13:30	14:30	F2F seminar <b>Dr Cathy Crunelle, <i>Title coming soon</i></b> <b>ENGIE LABORELEC, 'Future Home Lab' manager</b> <b>Abstract:</b> coming soon
14:30	15:30	Remote seminar <b>Dr Dimosthenis Ioannidis, <i>R&amp;I Infrastructures and DIHs ecosystems for enabling Smart Cities technologies development</i></b> <b>CERTH (Centre for Research &amp; Technology HELLAS)</b> <b>Abstract:</b> coming soon
15:30	16:00	Coffee break
16:00	18:00	Proclamation of Intake 1 student results and closing session