What if buildings and urban spaces could reveal their underlying ambient behaviors? How could this information respond and adapt to changing environmental and social conditions? How can we harness technology to develop more sustainable and comfortable approaches to designing and inhabiting the built environment?

The key research focus of this workshop is on integrating responsive architectural, spatial and, artifact design with context-aware computing techniques. Context-aware systems analyze situated and real-time data from users and ambient phenomena to adapt to changes in the users, usage, and environment of a space. With the popularity of Arduino microelectronics and the like, designers can now employ low-cost off-the-shelf sensors and actuators to gather data from a space, a building, or even a city. Dynamic phenomena can be traced and analyzed to inform the design process and develop new responsive or adaptive design solutions.

Participants will investigate how to apply data sensing and gathering to the design of responsive, adaptive and persuasive environments. To do so, they will learn to use physical computing (e.g. Arduino) and visual scripting (e.g. Grasshopper, Processing) to design and develop:

- Prototypes of responsive and adaptive architectures for new and existing spaces
- An understanding of the opportunities found in working between data collected from environmental sensors, physical models, and computational simulations.
- Sensory electronic artefacts that enhance occupant’s awareness of their surroundings.

**SENSE AND SUSTAINABILITY**

**SEMINARI INTERNACIONAL**

**quota d’inscripció** 250€

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**organització** ETSAB UPC + SIAL_RMIT
Spatial Information Architecture Laboratory
Royal Melbourne Institute of Technology

responsible ETSAB: Eloi Coloma

el seminari es desenvoluparà en anglès

dates i lloc del 12 al 19 de novembre de 2013 a l’ETSAB

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convocatòria presentació de sol·licituds fins el 4 de novembre 10:30-12:30 h a l’Oficina de Relacions internacionals ETSAB

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