Research topics - 40th cycle (2024-2027)

Thematic Area: Architecture

- **Topic:** Circular product design in the domestic environment – The home appliance system
    - **Tutor:** Fiore
    - **Funded by:** –

- **Topic:** Exploring the Role of Street Experiments in Promoting Active Mobility and Sustainable Urban Development
    - **Tutor:** Rossetti
    - **Funded by:** 50% cofunded by tutor

- **Topic:** Cataloguing and analyzing damage to churches in the Emilia-Romagna region following the 2012 earthquake for their preservation
    - **Tutor:** Ottoni
    - **Funded by:** DM629, art.10

- **Topic:** Digital archives-platforms for architectural design – Innovative tools for teaching, dissemination, conservation, and innovation with reduced environmental impact
    - **Tutor:** Quintelli
    - **Funded by:** RER

Thematic Area: Infrastructures

- **Topic:** Mixed flow modelling through the lattice Boltzmann method
    - **Tutor:** Maranzoni
    - **Funded by:** –

- **Topic:** Gravity currents in geologic media with application to CO_2 injection and trapping
    - **Tutor:** Longo
    - **Funded by:** –

- **Topic:** Mitigation and Adaptation in Resilient Coastal and Estuarine Integrated Units
    - **Tutor:** Longo
    - **Funded by:** –

- **Topic:** Green Road – Innovative materials to support the application of Dynamic Wireless Power Transfer on roads
    - **Tutor:** Montepara
    - **Funded by:** –

- **Topic:** Re-use of plastics derived from multilayered food carton recycling processes as a modifier for asphalt mixtures
    - **Tutor:** Tebaldi
    - **Funded by:** DM630, EcoRevive

- **Topic:** Effects and benefits of calcium oxide hydration reaction in cold recycling asphalt mixtures
    - **Tutor:** Romeo
    - **Funded by:** DM630, Fassa Bortolo

- **Topic:** Enhancing maximum circularity in the asphalt world through the innovative re-use of recycled asphalt pavements
    - **Tutor:** Giuliani
    - **Funded by:** ENI

- **Topic:** Long-life asphalt pavement based on RAP recycling – Performance, mechanism, environmental analysis

    - **Tutor:** Tebaldi
    - **Funded by:** Research Grant of China Scholarship Council

Thematic Area: Structures

- **Topic:** Residual service life estimation of as-built and repaired RC and PC structures and infrastructures subjected to corrosion phenomena

    - **Tutor:** Belletti
    - **Funded by:** –

- **Topic:** Development and application of algorithms based on Machine Learning for the analysis of the behavior of geotechnical structures

    - **Tutor:** Segalini
    - **Funded by:** DM630, ASE