Project Title	Supervisor
Development of a smart system to support the provision of sources of inspiration in engineering design tasks	Prof. Yuri Borgianni
Design of a platform to share and edit 3D models for inspection, physical and virtual prototyping	Prof. Yuri Borgianni
Bio-compatible and/or biodegradable (opto)electronics and/or batteries	Prof. Franco Cacialli
Engineering Biomaterials for Light-active Biohybrid Interfaces	Prof. Franco Cacialli
High and Low Cycle Fatigue Characterization of Advanced Engineering Materials: Finite Element Analysis and Experiments	Prof. Franco Concli
Tribology of Gears and Bearings: testing, modelling and simulations	Prof. Franco Concli
Mixed Reality to support Training in Industry	Prof. Patrick Dallasega
Design of anthropocentric collaborative robotic applications for product assembly	Prof. Patrick Dallasega
The Future of Immersion: AI in Real-Time Adaptive VR Simulators	Prof. Michael Haller
Dashboard Renaissance: Designing Next-Gen Interactive Experiences for Future Mobility	Prof. Michael Haller
Design and simulation of advanced semiconductor devices	Prof. Paolo Lugli
Fabrication, testing and characterization of sensors	Prof. Paolo Lugli
The extended theory of Aharonov-Bohm for electrodynamics and quantum mechanics, and its applications, in particular to omopolar Faraday generators with tunnel-effect contacts	Prof. Giovanni Modanese
Theory and applications of the Lindblad master equation for open quantum systems, with special focus on systems of qubits in quantum computing and quantum optics	Prof. Giovanni Modanese
Environmentally friendly thin-film electronics based on natural materials	Prof. Niko Münzenrieder
Integration of soft electronics into everyday objects, textiles, and artificial skins	Prof. Niko Münzenrieder
AI engineering for distributed dependable software systems	Prof. Claus Pahl
Intelligent resource management for IoT edge and cloud computing	Prof. Claus Pahl
Brain and body computer interface controlled systems and robots	Prof. Angelika Peer
Context-aware human-robot collaboration	Prof. Angelika Peer
Organic Neuromorphic Devices for Brain-Inspired Computing	Prof. Luisa Petti
Sustainable Printed Sensors for Smart and Digital Agrifood Systems	Prof. Luisa Petti
Leveraging AI to develop and mainatain Malware Information Sharing Platform	Prof. Barbara Russo
Software Security. Leverign Large language Models to detect vulnerabilities, generate software artefacts for security, classify software weaknesses	Prof. Barbara Russo
Multi-body systems modelling and optimization towards digital twin solutions	Prof. Renato Vidoni

Development of safe and optimal motion planning algorithms for Industrial Collaborative Robotics solutions	Prof. Renato Vidoni
Nonlinear control of quadrupedal robots (the AnyMal)	Prof. Karl von Ellenrieder
Safety critical control for vehicle platooning	Prof. Karl von Ellenrieder