

Research Group	People	Teaching Activities / Courses	Research Activities
Mechanics of Materials and Structures	Prof. Egidio RIZZI egidio.rizzi@unibg.it Dr. Rosalba FERRARI rosalba.ferrari@unibg.it	* <i>Mechanics of Materials and Structures</i> * <i>Complements of Mechanics of Material and Structures</i> * <i>Dynamics, Instability and Inelasticity of Structures</i> * <i>Computational Mechanics of Solids and Structures</i>	* Mechanics of Materials and Structures * Dynamics and Instability of Structures * Computational Mechanics: Finite Element Method, Discrete Element Method (DEM) * Vibration control in structural dynamics and earthquake engineering: tuning of passive Tuned Mass Damper (TMD) devices * System identification by inverse analysis * Structural analysis, FEM modelling and updating of historic constructions * Elastoplastic structural analysis and Limit Analysis of truss-frame structures * Structural Health Monitoring
Inorganic Chemistry and X-Rays Diffraction	Prof. Isabella NATALI SORA isabella.natali-sora@unibg.it	* <i>Chemistry</i>	* Development of new photocatalysts for degradation of organic pollutants mainly in liquid phase * Development of ceramic foams as structured catalyst supports
Structural Analysis and Design	Prof. Paolo RIVA paolo.riva@unibg.it Prof. Alessandra MARINI alessandra.marini@unibg.it Dr. Andrea BELLERI andrea.belleri@unibg.it	* <i>Structural analysis</i> * <i>Design of RC structures</i> * <i>Design of Steel Structures</i> * <i>Seismic Design</i> * <i>Retrofit of Existing Structures</i>	* Seismic performance of new and existing structures * RE-centering devices and systems (rocking columns, walls...) * Seismic performance and retrofit of masonry and monumental buildings * Displacement Based Seismic Design of Structures * Structural Health Monitoring * Structural performance of RC precast buildings * Combined strategies for the requalification (architectural, seismic, thermal,...) of existing buildings
Architectural Design and Building production	Prof. Attilio PIZZIGONI attilio.pizzigoni@unibg.it Dr. Giuseppe RUSCICA giuseppe.ruscica@unibg.it	* <i>Architectural Design</i> * <i>Building Elements Technology</i> * <i>Building Ergotechnics</i>	* Parametric Design * Tensegrity structures * Origami structures * Reciprocal frame structures * Real-time localization for construction sites
Thermal physics and heat transfer	Prof. Simona TONINI simona.tonini@unibg.it Dr. Stephanie Fest-Santini stephanie.fest-santini@unibg.it	* <i>Technical Physics and HVAC Systems</i> * <i>Energy saving techniques in buildings</i>	* Analytical modelling of heat and mass transfer in two phase flows * Numerical simulations of two phase flow in atomisers * Application of micro computed tomography to heat and mass transfer * Interfacial phenomena
Surveying and Geomatics	Dr. Barbara MARANA barbara.marana@unibg.it	* <i>Surveying and Geomatics</i> * <i>Geographic Information Systems</i>	* GIS solutions of problems related to the territory
Sustainable Construction Materials	Prof. Luigi COPPOLA luigi.coppola@unibg.it Prof. Tommaso PASTORE tommaso.pastore@unibg.it Dr. Sergio LORENZI sergio.lorenzi@unibg.it Prof. Marina CABRINI marina.cabrini@unibg.it	* <i>Construction Materials</i> * <i>Repair Materials for existing masonry and reinforced concrete structures</i>	* Alkali-activated materials and geopolymers * Ternary blended binders based on sulphoaluminate cements - Durability and corrosion CSA matrix and in portland free mortars and concretes * Self-healing admixtures for concrete * Recycling of wastes for concrete production
Business Economics and Finance for Construction and Real Estate Companies	Prof. Maria Sole BRIOSCHI maria-sole.brioschi@unibg.it Prof. Andrea SALANTI andrea.salanti@unibg.it	* <i>Business Economics and Organization</i> * <i>Management of Construction and Real Estate Projects (from the a.y. 2018-19)</i> * <i>Real Estate Economics</i>	For construction and real estate companies: * Management control systems * Project evaluation * Corporate and project financing * Real Estate Markets
Cultural Heritage	Prof. Alessio CARDACI alessio.cardaci@unibg.it Prof. Giulio MIRABELLA ROBERTI giulio.mirabella@unibg.it	* <i>Architectural Drawing</i> * <i>Architectural Survey</i> * <i>Knowledge and conservation of cultural heritage</i> * <i>Graphic Design</i> * <i>Drawing, Arts and Music</i>	* Knowledge and conservation of cultural heritage * Structural Health Monitoring of historic constructions * 3D Survey * Drawing and HBIM * Industrial Archeology
Electric Power System	Prof. Mariacristina ROSCIA cristina.roschia@unibg.it	* <i>Smart Home</i> * <i>Electrical Installations</i>	* Smart home * Smart city * EVs and Smart mobility * Power systems * Lighting
Urban Planning and Development	Prof. Maria Rosa RONZONI maria-rosa.ronzoni@unibg.it	* <i>City Planning</i> * <i>Techniques for City Planning</i>	* Environmental sustainability planning * Landscape design * Sustainable mobility * Urban mobility planning * Prevention of Environmental Disasters