

## COMILLAS-ICAI Engineering Research Projects (SPRING & SUMMER 2019)

<a href="#">RP_DEA01</a>	Integration of smart sensors (RFIDs and cameras) on a production line
<a href="#">RP_DEA02</a>	Programming robots using virtual reality
<a href="#">RP_DEA03</a>	Pallet quality control
<a href="#">RP_DEA04</a>	Cutting-edge information and communications technologies for Smart Grids
<a href="#">RP_DEA05</a>	Low-cost sensor characterization for biomedical applications
<a href="#">RP_DIE01</a>	Testing power system protections
<a href="#">RP_DIE02</a>	Analisis of emissions (CO2 & NO2) of medium motor vehicles and the indirect emissions of a typical electric vehicle (CO2) in his/her country of origin
<a href="#">RP_DIE03</a>	Performance tests of electric machines
<a href="#">RP_DIE04</a>	Calibration of measuring instruments in the Electric Systems Lab.
<a href="#">RP_DIE05</a>	State-of-the-art on flexibility options for investment in a decarbonized electric power system
<a href="#">RP_DIM01</a>	Optimization of mechanical and thermal properties of microencapsulated antibiotic bone cements with improved antimicrobial activity
<a href="#">RP_DIM02</a>	Improved bonding strength of acrylic adhesives reinforced with silanised graphene
<a href="#">RP_DIM03</a>	Influence of Graphene Nanoplatelets on Mechanical Properties of Epoxy Adhesive Joints
<a href="#">RP_DIM04</a>	Biogas from anaerobic digestion of organic substrates; Building and operating anaerobic digestors
<a href="#">RP_DIM05</a>	Chemical functionalization of graphene for improved dispersion in polymeric matrix composites
<a href="#">RP_DIM06</a>	Development of parametric models of the human body
<a href="#">RP_DIM07</a>	Mechanical characterization of GRP and CFRP composites reinforced with graphene nanoplatelets
<a href="#">RP_DIM08</a>	Fire resistant adhesive joints; Study of the mechanical behavior
<a href="#">RP_DIM09</a>	Development of Nanomaterial based Scaffolds for Bone Tissue Regeneration
<a href="#">RP_DIM10</a>	Numerical simulation of adhesive joints
<a href="#">RP_DIM11</a>	Additive manufacturing of railway cantilever system
<a href="#">RP_DIM12</a>	Numerical simulation of 3D printing process
<a href="#">RP_DIM13</a>	Assessment of the birth-dead FEM technique to simulate the loss of stiffness in wood beams under fire conditions
<a href="#">RP_DIM14</a>	Numerical analysis of fire spread in highly densely populated areas
<a href="#">RP_DOI01</a>	Making teaching material for learning Process Statistical Control at class
<a href="#">RP_DOI02</a>	Energy poverty in the US
<a href="#">RP_DTC01</a>	Application of Machine Learning techniques to classification problems
<a href="#">RP_DTC02</a>	Application of Machine Learning to usupervised learning problems
<a href="#">RP_DTC03</a>	Application of Machine Learning to regression problems
<a href="#">RP_DTC04</a>	Assessment of IoT contexts through Bluetooth Low Energy Networks
<a href="#">RP_IIT01</a>	Impact of the generation expansion decisions in the current TEP problem
<a href="#">RP_IIT02</a>	Impact of the hourly representation in the operation of the European transmission network
<a href="#">RP_IIT03</a>	Transition of the transmission network to a 100 % renewable European system
<a href="#">RP_IIT04</a>	Including battery investment decisions into a long-term transmission expansion planning model
<a href="#">RP_IIT05</a>	Prerequisites for the emergence of an hydrogen economy in Spain

**LEGEND**

- DEA** Department of Electronics, Control and Communications
- DIE** Department of Electrical Engineering
- DIM** Department of Mechanical (and Materials) Engineering
- DOI** Department of Industrial Organization
- DTC** Department of Telematics and Computer Sciences
- IIT** Institute for Research in Technology