

TIC-159 Research & Development in Engineering Graphics, Industrial Design and SIG

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The research group on “Research & Development in Engineering Graphics, Industrial Design and SIG” is comprised of degree holders in different branches of Engineering - Industrial, Agricultural and Topographic. Its scientific and technical activity is mainly focused on the application of graphic tools in two fields - SIG, Cartography and Topography, and CAD and Virtual Reality.

Research lines

- Automation in the manufacturing analysis of industrial designs
- Design and analysis of plastic-injection parts and molds
- Design, patent development and new products
- Advanced CAD design CAD programming
- 3D printing and prototyping
- Geographic information systems applied to agriculture, renewable energies, archaeology and heritage
- Generation of 3D models and scenarios from photographs or laser scanning
- Application of geographic information systems for managing information and space analysis, in fields such as municipal management, management of infrastructures and services
- Topographic data taking geared towards the modeling and generation of 3D scenarios and recreations

Related services and products

- [Automated validation method of the manufacturability of three-dimensional object designs based on their geometry](#)
- [Device for aesthetically improving the female bust](#)
- [On/off switching device and switching method based on QR codes](#)
- [Detachable cleat for cycling footwear](#)
- [Procedure for obtaining virtual geometries for detecting non-moldable zones in plastic parts](#)
- [Method and system for obtaining virtual geometries and detection of non-moldable zones in parts - linked to alternative patent P201631010 should the response to suspension not succeed](#)
- [Standalone Photobioreactor - 2015 PROTOTYPES](#)
- [Device for muscle training](#)
- [Electronic trekking pole](#)
- [Procedure for designing the knock-out rod system for a mold](#)
- [Device for putting on and removing socks and stockings](#)
- [Design of plastic-injection parts and molds](#)
- [Automation of design processes](#)
- [CAD, CAM and CAE programming](#)
- [Product development](#)
- [Specialization courses on Research & Development in Engineering Graphics, Industrial Design and SIG](#)
- [Design and implementation of municipal geographic information systems for agriculture or environmental management Traceability](#)
- [Topographic and photogrammetric tasks for civil works](#)
- [Rapid prototyping](#)

Spanish website: <http://bit.ly/2LtqcAy>