

United Technologies Research Centre Ireland, Ltd.

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Internship at UTRC Ireland – Power Electronics

United Technologies Corporation (UTC) is a \$62 billion dollar, diversified company that provides a broad range of high-technology products and services to the global aerospace and building systems industries. UTC's commercial businesses are Otis elevators and escalators and UTC Climate, Controls & Security, a leading provider of heating, ventilation, air conditioning, fire and security systems, building automation and controls. Our aerospace businesses are Sikorsky aircraft and the new UTC Propulsion & Aerospace Systems, which includes Pratt & Whitney aircraft engines and UTC Aerospace Systems aerospace products.

The company also operates a central research organization, United Technologies Research Center (UTRC) that pursues technologies for improving the performance, energy efficiency and cost of UTC products and processes. Founded in 1929, UTRC is located in East Hartford, Connecticut (U.S.), with an office in Berkeley, California, and research and development centres in Shanghai, China, and Cork, Ireland.

UTRC invites qualified individuals to apply for the following position in its European research hub in Ireland. A competitive compensation and benefits package will be provided to the successful candidates.

UTRCI currently has a student internship opportunity for 6 months with an immediate start.

Internship Program

This internship program will involve analysis of architectures for aircraft actuation systems, with special emphasis on electrohydrostatic and electromechanical actuators. The characterization of the actuators will focus on the motor drive and electrical motor and will take into account system integration, safety constraints and operation profiles during flight and on-ground operations. An additional task will include modelling and simulation of relevant actuation systems.

Required experience/skills

Masters or PhD student with a strong academic record in Power Electronics or a related discipline, with emphasis on actuation systems and with excellent mathematical, analytical and problem-solving ability. Knowledge on aircraft systems will be a plus.

Preferred software skills: Matlab/Simulink, PSIM, Dymola.

The ideal candidate is a self-starter who works well in an international teaming environment, is extremely well-organized and has excellent interpersonal, leadership and communication skills.

This position will be located at UTRC's European Hub in Cork, Ireland and will report to the in-country General Manager. To be eligible to apply for the position, candidates must be legally entitled to work and reside in Ireland.

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