

Department of Electronic Systems Engineering:

[Dr. Ing. David Zammit-Mangion](#)

- Electronics System Design
 - Avionics and cockpit displays
 - Aircraft Performance
 - Aircraft Safety
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Department of Industrial Electrical Power Conversion:

[Dr Cedric Caruana Mifsud](#)

- Control of electrical drives
- Power Quality
- Wind Energy Conversion

[Dr Joseph Cilia](#)

- Sensorless control of induction motor drives
- The use of photovoltaics as an alternative source of energy
- Electric vehicles

[Dr Ing. Cyril Spiteri Staines](#)

- Power Electronics
 - Machine Control
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Department of Systems and Control Engineering:

Ms. Alexandra Bartolo

- Image processing
- Computer vision and 3D vision
- Machine intelligence and automation

Ing. Marvin Bugeja

- Stochastic control
- Adaptive control
- Computational intelligence
- Robotics

[Dr Ing. Kenneth P. Camilleri](#)

- Image and signal processing
- Computer vision and 3D vision
- Pattern analysis and recognition

Faculty of Engineering staff's research interests

- Machine intelligence and automation
- Biomedical and rehabilitation engineering

Ms. Tracey Cassar

- Biomedical signal processing
- Biomedical and rehabilitation engineering
- Modelling, estimation and classification

Dr Ing. Simon G. Fabri

- Adaptive and nonlinear control systems
- Intelligent control using neural networks
- Computational Intelligence techniques: neural networks, fuzzy logic etc
- Stochastic control
- Robot control
- Biomedical applications of systems and control

Mr Kenneth Scerri

- Spatio-Temporal Modelling
- Hierarchical Modelling and Bayesian Estimation of Spatio-Temporal Systems
- Multidimensional Sampling Theory and Signal Reconstruction

Department of Industrial and Manufacturing Engineering:

Dr Ing. Jonathan C. Borg

- Engineering Design
- Innovation & Creativity
- Design For Manufacture (DFM)
- Design For Assembly (DFA)
- Design for the Environment (DFE)
- Integrated Development of Products & Technical Systems
- CAD/CAM /CIM

Mr Philip J. Farrugia

- Computer-Aided Conceptual Design Tools
- Rapid X-ing
- Time Compression Technologies

Dr Ing. Michael A. Saliba

- Dexterous Robot Hands
- Robotic Grasping and Manipulation
- Robot Sensors and Actuators
- Tele-operation
- Glove Input devices / Haptic Feedback
- Industrial Robotics
- Industrial Automation

Department of Mechanical Engineering:

[Dr. Ing. Mario Farrugia](#)

- Thermodynamics
- Power Generation
- Automotive, powertrains
- Mechatronics

[Prof. Dr Ing. Robert Ghirlando](#)

- Engineering design, especially the teaching of engineering design
- Energy and the environment
- Internal combustion engines
- University-industry links

[Dr. Ing. Christopher Micallef](#)

- Fluid Dynamics
- Thermo Dynamics

[Dr Ing Martin Muscat](#)

- Finite Element Stress Analysis
- Pressure Vessel Design
- Experimental Stress Analysis

[Dr. Ing. Zdenka Sant](#)

- Solid body mechanics
- Stress analysis
- Biomechanics

Department of Metallurgy and Materials Engineering:

[Dr Stephen Abela](#)

- Nano-engineering of materials
- Hard surface coatings
- Electronics materials

[Ing. John Betts](#)

- Laser material deposition
- Laser component repair
- Laser material modification

[Mr Joseph Buhagiar](#)

- Thermochemical processes
- Surface engineering

Prof. Dr Ing. Maurice Grech

- Heat treatments
- Austenitic ductile iron
- Surface engineering

Mr Bertram Mallia

- Nano-engineering of materials
- Biomaterials

Prof. Dr Barry L. Mordike

- Surface Engineering
 - Powder Metallurgy
 - Laser Technology
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