



## PhD in INDUSTRIAL AND INFORMATION ENGINEERING

### LIST OF COURSES

Academic Year 2024-2025

| CURRICULUM Information engineering  |                   |                                     |                                |   |
|---|-------------------|-------------------------------------|--------------------------------|---|
| COURSE  | TEACHER           | CONTACT                             | PERIOD                         | LOCATION  |
| 5G-6G/Internet of Things. Massive, reliable, efficient transmission techniques    | Babich Fulvio     | babich@units.it                     | February 14 – February 19 2025 | Biblioteca Carli, Building C2, Room Arich, Building B |
| A deterministic method for solving optimization problems: alternating projection. | Buttazzoni Giulia | gbuttazzoni@units.it                | February 19 – February 21 2025 | Biblioteca Carli, Building C2                         |
| Advanced techniques for the characterization of industrial materials              | Cosmi Francesca   | cosmi@units.it                      | March 14 – April 4 2025        | To be defined   |
| Cybersecurity: a look at (some) vulnerabilities in (some) depth                   | Bartoli Alberto   | bartoli.alberto@units.it            | May 28 – June 6 2025           | To be defined   |
| Application of textile fibers in composite materials                              | Illesi Matteo     | tecnico@armare.it                   | May 15 – May 16 2025           | Biblioteca Carli, Building C2                         |
| Battery Management Systems  | Raimondo Davide   | davidemartino.raimondo@dia.units.it | June 3 – June 6 2025           | Biblioteca Carli, Building C2                         |



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| COURSE  | TEACHER                           | CONTACT  | PERIOD                          | LOCATION  |
| BPM standards and research topics   | Campagna Dario / Del Piccolo Alan | campagna@esteco.com, delpiccolo@esteco.com                       | April 1 – April 10 2025         | Biblioteca Carli, Building C2                   |
| Controls and data network for energy production   | Chiandone Massimiliano            | mchiandone@units.it  | September 9 . September 12      | To be defined                                   |
| DC ship power systems: evolution & research challenges                                    | Sulligoi Giorgio                  | gsulligoi@units.it   | To be defined                   | To be defined                                   |
| Eco-design principles (under the new European Legislation)                                | Bortoluzzi Anna                   | anna.bortoluzzi@quotasette.it, amio@units.it                     | March 20 – May 22               | To be defined                                   |
| Electromechanical stability of alternator-network systems in the transition to renewables | Vicenzutti Andrea                 | avicenzutti@units.it   | July 04, July 11, July 18 2025  | To be defined                                   |
| Methods for advanced brain imaging  | Ajčević Miloš                     | majcevic@units.it  | September 3, September 10, 2025 | Biblioteca Carli, Building C2 (to be confirmed) |
| Microgrid modeling & control  | Bosich Daniele                    | dbosich@units.it   | May 5 – May 8 2025              | To be defined                                   |
| Mobile Robotics   | Seriani Stefano                   | sseriani@units.it  | February 13 – February 14 2025  | Remote  |
| Optimization methods for engineering  | Poloni Carlo                      | poloni@units.it  | May 8 – May 9 2025              | To be defined                                   |
| Partial differential equations-analytical and   | Olivo Matteo                      | <a href="mailto:matteo.olivo@units.it">matteo.olivo@units.it</a> | June 10 – June 17 2025          | Biblioteca Carli, Building C2                   |



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| numerical solution methods in the engineering practice                  |                      |                                  |                                | (to be confirmed)      |
| Robotics  | Seriani Stefano      | sseriani@units.it                | February 10 – February 11 2025 | Remote                 |
| Structural integrity: 3D crack fatigue propagation with finite elements | Lepore Marcello      | marcello.lepore@dia.units.it     | October 1 – October 22 2025    | To be defined          |
| The Julia Programming Language: an Introduction                         | Zamolo Riccardo      | rzamolo@units.it                 | May 22 – June 6 2025           | Sala Atti, Building C1 |
| Weather data for energy simulation                                      | Manzan Marco         | manzan@units.it                  | May 6 2025 - May 14 2025       | To be defined          |
| Writing proposals in response to European calls                         | Cattivelli Valentina | valentina.cattivelli13@gmail.com | February 4 – February 17       | Remote                 |



| CURRICULUM Mechanical engineering, naval architecture, energy and production |         |         |        |          |
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