

FACULTY OF **ENGINEERING**

DEGREE COURSE: **COMPUTER AND CONTROL ENGINEERING**

MASTER DEGREE: **COMPUTER AND CONTROL ENGINEERING**

SUBJECT: DISTRIBUTED CONTROL SYSTEMS

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OBJECTIVES

1. Control of a distributed system
2. Task scheduling in a distributed system
2. Elements of a distributed system
3. SCADA system

CONTENTS

- Recalls of Automatic Control
- Recalls of Process Automation
- Real time control of a distributed system
- Task scheduling in a distributed system
- Embedded systems
- Programmable logic controller
- Sequential Functional Charts
- Petri nets
- Telecommunication networks
- SCADA systems

LEARNING OUTCOMES

Understanding the theoretical solutions and the available technologies to control distributed systems.

ASSESSMENT

Written exam: multiple-choice tests and open-ended questions

RECOMMENDED TEXTBOOKS

Even if the provided material is sufficient for a complete comprehension of the course, the following reading is suggested:

- "Modern Control Systems", 12° Edition, Dorf R. C. and Bishop R. H.,
 - Supervisory Control and Data Acquisition, 4° Edition, Stuart A. Boyer
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