Course guide
240IOI31 - 240IOI31 - Quantitative Methods of Industrial Process Management II

Unit in charge: Barcelona School of Industrial Engineering
Teaching unit: 732 - OE - Department of Management.
Degree: MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2014). (Optional subject).
Academic year: 2023  ECTS Credits: 4.5  Languages: Spanish

LECTURER

Coordinating lecturer: Pastor Moreno, Rafael
Others: Pastor Moreno, Rafael
         García Villoria, Alberto
         Maquirriain Antoñanzas, Javier

PRIOR SKILLS

REQUIREMENTS

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
CEEORG2. Design, develop and apply analytical methods (quantitative methods, statistics, models and decision tools) in order to make strategic, tactical and operational decisions for organizations.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

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STUDY LOAD

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<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
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<tr>
<td>Hours small group</td>
<td>13,5</td>
<td>12.00</td>
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<tr>
<td>Self study</td>
<td>72,0</td>
<td>64.00</td>
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<tr>
<td>Hours large group</td>
<td>27,0</td>
<td>24.00</td>
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Total learning time: 112.5 h
## CONTENTS

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
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### Full-or-part-time: 7h 30m
Practical classes: 3h  
Self study: 4h 30m

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### Full-or-part-time: 3h
Practical classes: 3h

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### Full-or-part-time: 3h
Theory classes: 3h

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### Specific objectives:

**Full-or-part-time: 16h 30m**
Theory classes: 4h 30m  
Practical classes: 7h 30m  
Self study: 4h 30m

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**Full-or-part-time: 12h**
Theory classes: 3h  
Practical classes: 6h  
Self study: 3h
Description:

**Full-or-part-time:** 0h 30m  
Theory classes: 0h 30m

Description:

**Full-or-part-time:** 1h  
Theory classes: 1h

Description:

**Full-or-part-time:** 4h 30m  
Theory classes: 4h 30m

Description:

**Full-or-part-time:** 64h 30m  
Theory classes: 5h  
Practical classes: 1h 30m  
Guided activities: 58h

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**GRADING SYSTEM**

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**EXAMINATION RULES.**

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**BIBLIOGRAPHY**

**Basic:**
- Corominas Subias, Albert ; Carles Batlle Arnau ; Ernest Benedito Benet ; Bruno Domenech Lega ; Enric Fossas Colet ; Aberto García Villoria ; Amaia Lusa García ; Rafael Pastor Moreno. Técnicas de Optimización. Madrid: Dextra Editorial, 2021. ISBN 9788417946531.

**Complementary:**
- Boussaid, Ilhem; Lepagnot, Julien; Siarry, Patrick. "A survey on optimization metaheuristics". Information Sciences [on line]. Vol. 237, 10 July 2013, pp. 82-117  [Consultation: 20/04/2023]. Available on:

RESOURCES

Audiovisual material:
- Nom recurs. Resource

Other resources: