## **Specialized Didactics of Subject Areas**

## **COURSE CONTENT:**

## 1. Didactics of Informatics

## **Topics**

- 1. The Field of Informatics Didactics
  - Informatics and Information and Communication Technologies (ICT) curricula
  - Didactic Transformation
- 2. Didactics of Programming
  - Knowledge and Skills in Programming
  - Misconceptions and Challenges
- 3. Didactics of Programming (Continued)
  - Didactic Approaches
  - Designing Learning Activities
- 4. Educational Programming Environments for Primary and Secondary Education
- 5. Concept Mapping in Informatics
- 6. Didactics of Informatics Concepts
  - Text comprehension (models and question design)
  - Analogies and simulations in teaching Informatics concepts
- 7. Educational Games in Informatics
- 8. Forms and Tools of Assessment
- 9. Web 2.0 Tools for Supporting ICT Activities