



## Universidad de Jaén

Escuela de Doctorado. Vicerrectorado de  
Enseñanzas de Grado, Postgrado y  
Formación Permanente

### **Doctoral studies in Information and Communication Technologies**

#### **Basic competencies**

CB11 - Systematic understanding of a field of study and command of research skills and methods related to this field.

CB12 - Ability to conceive, design, or create, put into practice, and adopt a substantial research or creative process.

CB13 - Ability to contribute to broadening the frontiers of knowledge through original research.

CB14 - Ability to make a critical and evaluative analysis and synthesis of new and complex ideas.

CB15 - Ability to communicate with the academic and scientific community and with society in general about their corresponding areas of knowledge through the usual means and languages used in the international scientific community.

CB16 - Ability to promote scientific, technological, social, artistic, or cultural advances in academic and professional contexts within a knowledge-based society.

#### **Personal abilities and skills**

CA01 - Operate effectively within contexts where there is little specific information.

CA02 - Find the key questions that need to be answered in order to solve a complex problem.

CA03 - Design, create, develop, and undertake novel and innovating projects in the field of knowledge.

CA04 - Work in an international and multi-disciplinary context on a team as well as independently.

CA05 - Integrate different areas of knowledge, cope with complexity, and formulate opinions with limited information.

CA06 - Intellectual criticism and defense of solutions.

#### **Other competencies**

CE01 - Capacity to integrate the knowledge acquired on ICT and Computer Models to the resolution of problems during the course of the thesis.

CE02 - Capacity to apply the corresponding scientific methodology in the thesis work.

CE03 - Capacity to bring up solutions to subsequent problems during research work.