

## **Appendix I:**

**List of job opportunities including details on type, requirements, profile and salary.**

### **JOB REFERENCE: VTIT-AINF-1**

#### **KNOWLEDGE TRANSFER AREA: COMPUTER VISION**

#### **1. CATEGORY:**

1 ASCETI post

#### **2. REQUIREMENTS**

- PhD in Computer Science, Telecommunications, Industrial Engineering, Mathematics, Physics or similar.
- Previous research in the area of Computer Vision and demonstrable experience in implementing Computer Vision projects.

#### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

#### **1. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in existing innovation projects with the industry to develop work in the field of Computer Vision.
- Supervise doctoral theses on the subject of Computer Vision. You will be assigned a pre-doctoral intern.

#### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Computer Engineering.

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

#### **6. PREFERRED MERITS/PROFILE:**

- Experience in projects with companies linked to the subject matter of the contract
- Articles related to the subject matter of the contract and published in JCR-cited journals
- Project management related to the subject matter of the contract
- Public and private funding obtained for research projects
- Good communication skills and proactive

- Programming Skills (C++, Matlab, Java, Python, Visual Studio, etc.)
- Experience in supervising academic research work, particularly doctoral theses.
- Experience in leading work teams, preferably multidisciplinary
- Experience in developing prototypes with low-cost hardware (Arduino, Raspberry, etc.)
- Demonstrably fluent in English.
- Experience gathered through time spent in technological or industry research centres, relevant to the field of Computer Vision.

## **7. REPORT TO:**

Vice-Chancellor of Knowledge Transfer and Technological Innovation.

## **JOB REFERENCE: VTIT-AINF-2**

### **KNOWLEDGE TRANSFER AREA: BIG DATA**

#### **1. CATEGORY:**

1 ASCETI post

#### **2. REQUIREMENTS**

- PhD in Computer Science, Telecommunications, Industrial Engineering, Mathematics or similar
- Previous research in the area of Big Data and demonstrable experience in carrying out Big Data projects.

#### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

#### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in existing innovation projects with the industry to develop work in the field of Big Data.
- Supervise doctoral theses on the subject of Big Data. You will be assigned a pre-doctoral intern.

#### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Computer Engineering.

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

#### **6. PREFERRED MERITS/PROFILE:**

- Experience in projects with companies linked to the subject matter of the contract
- JCR journal publications related to the subject matter of the contract
- Project management related to the subject matter of the contract
- Demonstrably fluent in English.
- Public and private funding obtained for research projects
- Good communication skills and proactive
- Experience in supervising students (degree/master/PhD)
- Experience in leading work teams, preferably multidisciplinary
- Experience gathered through time spent in technological or industry research centres, relevant to the field of Big Data.

## **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

## **JOB REFERENCE: VTIT-IDINF-1 KNOWLEDGE TRANSFER AREA: BIG DATA**

### **1. CATEGORY:**

1 Distinguished Researcher post

### **2. REQUIREMENTS**

- PhD in Computer Science, Telecommunications, Industrial Engineering, Mathematics or similar and have 15 years post-doctorate experience.
- Previous research in the area of Big Data and demonstrable experience in implementing Big Data projects.
- Research project management related to the subject matter of the contract.
- Participation in Big Data projects with industry and companies.
- Previous experience in supervising doctoral theses.
- Demonstrably fluent in English.

### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in existing innovation projects with the industry to develop work in the field of Big Data.
  - Team leadership and strategy design.
- Supervise doctoral theses on the subject of Big Data. You will be assigned a pre-doctoral intern.

### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank

holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Computer Engineering.

Salary: Gross annual salary of €100,000

#### **6. PREFERRED MERITS/PROFILE:**

- Articles related to the subject matter of the contract and published in Q1 JCR-cited journals
- Public and private funding obtained for research projects
- Participation in international projects in areas of Big Data.
- Good communication skills and proactive
- Experience in leading work teams, preferably multidisciplinary
- Experience gathered through time spent in technological or industry research centres, relevant to the field of Big Data.

#### **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

### **JOB REFERENCE: VTIT-AINF-3**

### **KNOWLEDGE TRANSFER AREA: CYBERSECURITY**

#### **1. CATEGORY:**

1 ASCETI post

#### **2. REQUIREMENTS**

- PhD in Computer Science, Telecommunications, Industrial Engineering or similar
- Previous research in the field of Cybersecurity and demonstrable experience in implementing Cybersecurity projects.

#### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

#### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in existing innovation projects with the industry to develop work in the field of Cybersecurity.
- Supervise doctoral theses on the subject of Cybersecurity. You will be assigned a pre-doctoral intern.

#### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Computer Engineering.

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross

each year, subject to favourable annual assessment of research/innovation activity.

#### **6. PREFERRED MERITS/PROFILE:**

- Experience in projects with companies linked to the subject matter of the contract
- Articles related to the subject matter of the contract and published in JCR-cited journals
- Project management related to the subject matter of the contract
- Demonstrably fluent in English.
- Public and private funding obtained for research projects
- Good communication skills and proactive
- Experience in supervising academic work, particularly doctoral theses.
- Experience in leading work teams, preferably multidisciplinary
- Experience gathered through time spent in technological or industry research centres, relevant to the field of Cyber Security.

#### **7. REPORT TO:**

Vice-Chancellor of Knowledge Transfer and Technological Innovation.

### **JOB REFERENCE: VTIT-IDINF-2**

### **KNOWLEDGE TRANSFER AREA: CYBERSECURITY**

#### **1. CATEGORY:**

1 Distinguished Researcher post.

#### **2. REQUIREMENTS**

- PhD in Computer Science, Telecommunications, Industrial Engineering or similar and have 15 years post-doctorate experience.
- Previous research in the field of Cybersecurity and demonstrable experience in implementing Cybersecurity projects.
- Research project management related to the subject matter of the contract.
- Participation in Cybersecurity projects with industry and companies.
- Previous experience in supervising doctoral theses.
- Demonstrably fluent in English.

#### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

#### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in existing innovation projects with the industry to develop work in the field of Cybersecurity.
  - Team leadership and strategy design.
- Supervise doctoral theses on the subject of Cybersecurity. You will be assigned a pre-doctoral intern.

## **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Computer Engineering.

Salary: Gross annual salary of €100,000

## **6. PREFERRED MERITS/PROFILE:**

- Articles related to the subject matter of the contract and published in Q1 JCR-cited journals
- Public and private funding obtained for research projects
- Participation in international projects in the field of Cybersecurity
- Good communication skills and proactive
- Experience in leading work teams, preferably multidisciplinary
- Experience gathered through time spent in technological or industry research centres, relevant to the field of Cybersecurity.

## **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

## **JOB REFERENCE: VTIT-IDINF-3**

## **KNOWLEDGE TRANSFER AREA: IoT**

### **1. CATEGORY:**

1 Distinguished Researcher post.

### **2. REQUIREMENTS**

- PhD in Computer Science, Telecommunications, Industrial Engineering or similar and have 15 years post-doctorate experience.
- Previous research in the field of IoT and demonstrable experience in implementing IoT projects.
- Research project management related to the subject matter of the contract.
- Participation in IoT projects with industry and companies.
- Previous experience in supervising doctoral theses in software architecture for the Internet of Things.
- Demonstrably fluent in English.

### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in existing innovation projects with the industry to develop

work in the field of IoT.

- Team leadership and strategy design.
- Supervise doctoral theses on the subject of IoT. You will be assigned a pre-doctoral intern.

#### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Computer Engineering.

Salary: Gross annual salary of €100,000

#### **6. PREFERRED MERITS/PROFILE:**

- Articles related to the subject matter of the contract and published in Q1 JCR-cited journals, particularly related to software architecture for the Internet of Things and with the processing of large amounts of data in IoT.
- Public and private funding obtained for research projects
- Participation in international projects in the field of IoT.
- Good communication skills and proactive
- Experience in leading work teams, preferably multidisciplinary
- Experience gathered through time spent in technological or industry research centres, relevant to the field of IoT.

#### **7. REPORT TO:**

Vice-Chancellor of Knowledge Transfer and Technological Innovation.

#### **JOB REFERENCE: VTIT-AINF-4**

#### **KNOWLEDGE TRANSFER AREA: IoT**

#### **1. CATEGORY:**

1 ASCETI post.

#### **2. REQUIREMENTS**

- PhD in Computer Science, Telecommunications, Industrial Engineering or similar
- Demonstrable experience in implementing IoT projects.

#### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

#### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in existing innovation projects with the industry to develop



work in the field of IoT.

- Supervise doctoral theses on the subject of IoT. You will be assigned a pre-doctoral intern.

#### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Computer Engineering.

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

#### **6. PREFERRED MERITS/PROFILE:**

- Demonstrable experience in implementing IoT projects.
- Experience in projects with companies linked to the subject matter of the contract
- JCR journal publications related to processing large amounts of data in IoT.
- Project management related to the subject matter of the contract
- Demonstrably fluent in English.
- Public and private funding obtained for research projects
- Good communication skills and proactive
- Experience in supervising academic work and doctoral theses.
- Participation in work teams, preferably multidisciplinary
- Experience gathered through time spent in technological or industry research centres, relevant to the field of IoT.

#### **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

#### **JOB REFERENCE: VTIT-AINF-5**

#### **KNOWLEDGE TRANSFER AREA: CLOUD COMPUTING**

##### **1. CATEGORY:**

1 ASCETI post

##### **2. REQUIREMENTS**

- PhD in Computer Science, Telecommunications, Industrial Engineering or similar

Previous experience in implementing Cloud Computing projects.

##### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

##### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.



- Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in existing innovation projects with the industry to develop work in the field of cloud computing.
- Supervise doctoral theses on the subject of Cloud Computing. You will be assigned a pre-doctoral intern.

#### **5. CONTRACT FEATURES:**

Duration: Contract for three years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Computer Engineering.

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

#### **6. PREFERRED MERITS/PROFILE:**

- Experience in projects with companies linked to the subject matter of the contract
- Articles related to the subject matter of the contract and published in JCR-cited journals
- Project management related to the subject matter of the contract
- Demonstrably fluent in English.
- Public and private funding obtained for research projects
- Good communication skills and proactive
- Experience in supervising students, especially doctoral students
- Experience in leading work teams, preferably multidisciplinary

#### **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

#### **JOB REFERENCE: VTIT-AAC-6**

#### **KNOWLEDGE TRANSFER AREA: STEEL**

#### **1. CATEGORY:**

1 ASCETI post

#### **2. REQUIREMENTS**

- PhD in Sciences or Engineering
- Demonstrable practical experience in TEM and STEM Electron Microscopy.

#### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

#### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Collaborate with the DUPLEXFIN innovation project.
- Following guidelines from the Program manager:

- Be involved, in due course, in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
- Supervise doctoral theses on the subject of the structural and analytical characterisation of stainless steels. You will be assigned a pre-doctoral intern.

#### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: Faculty of Science, Department of Materials Science, Metallurgical Engineering and Inorganic Chemistry

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

#### **6. PREFERRED MERITS/PROFILE:**

The following is preferred:

- Previous experience in TEM/STEM techniques
- Previous experience in preparing samples of metallic materials for electron microscopy.
- Application of TEM/STEM techniques to the study of metallic alloys.
- --Articles related to the subject matter of the contract and published in JCR-cited journals
- Participation in industrial research projects.

#### **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

#### **JOB REFERENCE: VTIT-AMET-7-8**

#### **KNOWLEDGE TRANSFER AREA: METROLOGY AND MANUFACTURING ENGINEERING**

#### **1. CATEGORY:**

2 ASCETI posts

#### **2. REQUIREMENTS**

PhD in Engineering.

Previous experience in Metrology and Metrotechnics (dimensional and mechanical) and OFFLINE Monitoring of Manufacturing Processes.

#### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION

## INITIATIVES FROM THE CADIZ ITI

### **4. ACTIVITIES TO BE DEVELOPED:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs. In particular, at present, Minerva and AIRUNION projects among others.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
- Supervise doctoral theses on the subject of Metrology. You will be assigned a pre-doctoral intern.
- Redefine, redirect and reorganise the Dimensional and Mechanical Metrology Laboratories at the School of Engineering to support innovation projects and work external to the University of Cadiz. In this sense, arrangements should be made for quality control aspects to be improved or incorporated into methodological procedures either to be established or already set out in innovation projects and knowledge transfer contracts.
- Work on assessing, designing and developing methodology to improve performance of Manufacturing Processes in projects with companies and entities. Incorporation into R&D and mixed company-university ITT teams nearby, such as the province of Cadiz, will be permitted but there should also be a willingness to expand to wider contexts.
- Be part of the team opening a line of solid research in Metrology Elements for Engineering Manufacturing Processes within the framework of Industry 4.0 encompassing aspects of ONLINE assessment and evaluation.

### **5. CONTRACT FEATURES**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Mechanical Engineering and Industrial Design

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

### **6. PREFERRED MERITS/PROFILE:**

- Previous training in Manufacturing Engineering will be valued (preferably holding a Masters in Manufacturing Engineering) and (accredited) Research and Professional experience of at least 2 years working in Metrology and Metrotechnics (especially Dimensional and Mechanical) in assessing the surface integrity of pieces for Product Quality Control and Manufacturing Processes.
- (Accredited) ability to organise and manage Metrology Laboratories in accordance with standards required by accreditation bodies such as ENAC.
- Experience in projects with companies linked to the subject matter of the contract
- Articles related to the subject matter of the contract and published in JCR-cited journals
- Project management related to the subject matter of the contract

- Public and private funding obtained for research projects
- Proactive and good communication skills
- Experience in supervising students, especially doctoral students
- Experience in leading work teams, preferably multidisciplinary

**7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

**JOB REFERENCE: VTIT-AMON-9**

**KNOWLEDGE TRANSFER AREA: MONITORING/SENSORISATION**

**1. CATEGORY:**

1 ASCETI post

**2. REQUIREMENTS**

PhD in Engineering.

Previous experience in ONLINE Monitoring and OFFLINE Manufacturing Processes, incorporating Metrological Techniques.

**3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

**4. ACTIVITIES TO BE DEVELOPED:**

- Following the lead of the Program Manager, get involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.

- Design ONLINE sensorisation and monitoring systems for Material Forming Processes, Removal Processes (Conventional and Non-Conventional), Input (Welding and Additive Manufacturing) and Conservation (SIF, SPF, THF, ... ) to monitor and assess the Manufacturing Processes Quality and establish adaptive monitoring forms for its IMMEDIATE IMPLEMENTATION in industrial systems with various levels of automation. In this sense, arrangements should be made for quality control aspects to be improved or incorporated into methodological procedures either to be established or already set out in innovation projects and knowledge transfer contracts.

- Be part of a team belonging to a line of solid research in Automated Quality Control Elements for Manufacturing Processes Engineering within the framework of Industry 4.0 which encompasses aspects of ONLINE assessment and evaluation.

- Supervise doctoral theses on subjects linked to the subject matter of the contract. You will be assigned a pre-doctoral intern.

**5. CONTRACT FEATURES**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

## **6. PREFERRED MERITS/PROFILE:**

The following will be valued:

- Previous training in Manufacturing Engineering (preferably a Masters in Manufacturing Engineering) and (accredited) Research and Professional experience of, at least, 2 years in ONLINE MONITORING for Manufacturing Processes and in establishing Predictive Models starting with processing data from monitored signals. Use of auxiliary techniques for Product Quality Control and Manufacturing Processes
- (Accredited) ability to organise and manage Innovation Projects in Collaboration with Companies and Entities
- Articles related to the subject matter of the contract and published in JCR-cited journals
- Project management related to the subject matter of the contract
- Public and private funding obtained for research projects
- Proactive and good communication skills
- Experience in supervising students, especially doctoral students
- Experience in leading work teams, preferably multidisciplinary

## **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

## **JOB REFERENCE: VTIT-ASOLD-10 KNOWLEDGE TRANSFER AREA: WELDING**

### **1. CATEGORY:**

1 ASCETI post.

### **2. REQUIREMENTS**

- PhD in Engineering, Material Sciences specialising in Metallurgy or in Chemistry.
- Industry experience or in innovation projects in Shipbuilding and Welding and Joining Technologies.
- Demonstrably fluent in English.

### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Join the NAVALASER project.
- Following guidelines from the Program manager:
  - Be involved in other innovation projects which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in research and business projects related to welding in the field of industrial shipbuilding, in these following lines among others:
    - Develop, adapt and validate distinct welding technologies including among others: hybrid laser, friction/stir, etc.
    - Automated welding processes

- Codirect research work of interest to the line of welding technologies in the shipbuilding sector.
- Collaborate in producing research articles and communications for conferences regarding welding technologies in the shipbuilding sector.
- Supervise doctoral theses on the subject of welding. You will be assigned a pre-doctoral intern.

#### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Materials Science, Metallurgical Engineering and Inorganic Chemistry

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

#### **6. PREFERRED MERITS/PROFILE:**

- Experience in projects with companies linked to the subject matter of the contract.
- International Welding Engineer (IWE)
- Researcher in Viability Projects or Studies in Welding and Joining Technologies.
- Articles related to the subject matter of the contract and published in JCR-cited journals
- Project management related to the subject matter of the contract
- Doctoral theses and academic work supervision in laser welding and hybrid laser of metallic materials
- Public and private funding obtained for research projects
- Proactive and good communication skills
- Experience in supervising students, especially doctoral students
- Experience in leading work teams, preferably multidisciplinary
- Experience in handling welding stimulation software. Sysweld or similar.
- Knowledge of Automations and Electronics and Technologies 4.0.
- Demonstrable experience in projects developing or adapting welding technologies (LBW, EGW, FSW, GMAW etc.)
- Experience in verifying the quality of welding through non-destructive and destructive testing (microstructure, hardness, tension, corrosion)
- Knowledge of Shipbuilding
- Experience participating in R&D contracts in the shipbuilding sector.

#### **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

### **JOB REFERENCE: VTIT-ASOLD-11 KNOWLEDGE TRANSFER AREA: WELDING**

#### **1. CATEGORY:**

1 ASCETI post.

#### **2. REQUIREMENTS**

- PhD in Engineering.
- Previous experience in Monitoring and ONLINE and OFFLINE Inspection of Manufacturing Processes, incorporating Metrological Techniques, in

Manufacturing in the Shipbuilding Industry and in Developing Advanced Joining (FSW, CrioWelding) and multitask (Welding + Alternative TecWELD + Alternative Manufacturing Process) Technologies.

### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Collaborate in Advanced Welding projects (Friction Stir Welding, FSW, Combined Thermomechanical Union, CTU, Autoadhesive Joints, AJ, CrioWelding, CW).
- Following guidelines from the Program manager:
  - Be involved in developing other innovation projects which are strategic for the UCA and highly demanded by the province's business sector's innovation needs: Multitasking Welding-Forming Development (WEFOD), etc.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
- Collaborate in research and business projects related to welding in the field of industrial Shipbuilding, including the following initiatives:
  - Develop, adapt and validate various welding technologies such as those previously mentioned: FSW, CTU, CW, AJ, among others.
  - Develop joining and multitask flexible and automated technologies
  - Monitor new ON/OFFLINE Processes
  - Co-supervise doctoral theses relevant to welding technologies in the shipbuilding sector.
  - Codirect research work relevant to welding technologies in the shipbuilding sector.
  - Collaborate in producing research articles and communications for conferences regarding welding technologies in the shipbuilding sector.

### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Mechanical Engineering and Industrial Design.

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

### **6. PREFERRED MERITS/PROFILE:**

- Previous training in Manufacturing Engineering and (accredited) Research and Professional experience of, at least, 2 years in ON/OFFLINE MONITORING for Welding and general Manufacturing Processes and in establishing Predictive Models starting with processing data from monitored signals. Use of auxiliary techniques for Product Quality Control and Manufacturing Processes
- (Accredited) ability to organise and manage Innovation Projects in Collaboration with Companies and Entities
- Articles related to the subject matter of the contract and published in JCR-cited journals
- Project management related to the subject matter of the contract.
- Experience in R&D projects with companies linked to the subject matter of the contract.
- International Welding Engineer (IWE)
- Researcher in Viability Projects or Studies in Welding and Joining



- Technologies.
- Public and private funding obtained for research projects
  - Proactive and good communication skills
  - Experience in supervising students, especially doctoral students
  - Experience in leading work teams, preferably multidisciplinary
  - Experience in handling CAD/CAM/CAE including specific welding simulation software. Sysweld or similar.
  - Knowledge of Shipbuilding

**7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

**JOB REFERENCE: VTIT-ACO -12**

**KNOWLEDGE TRANSFER AREA: SURFACE ENGINEERING FOR AEROSPACE ALLOYS**

**1. CATEGORY:**

1 ASCETI post

**2. REQUIREMENTS**

PhD in Chemistry or Engineering

Previous experience in studying corrosion and protection of alloys for aerospace application.

Previous experience in anodised technologies and chemical conversion coatings free from Cr(VI) on aluminium alloys.

Previous experience in surface activation of compound materials through laser.

**3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

**4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:

- Collaborate in developing ongoing innovation UCA projects with the aeronautical industry.
- Collaborate in developing new innovation projects, strategic to the UCA related to the aerospace industry.
- Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.

- Supervise doctoral theses on the subject of light metal alloys and compound materials used in the aerospace industry. You will be assigned a pre-doctoral intern.

## 5. CONTRACT FEATURES:

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Materials Science, Metallurgical Engineering and Inorganic Chemistry

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

## 6. PREFERRED MERITS/PROFILE:

- Experience in projects with companies linked to the subject matter of the contract in the aeronautical sector.
- Project management related to the subject matter of the contract.
- Level of participation in European projects related to the subject matter of the contract in the aeronautical sector.
- Public and private funding obtained for research projects
- Proactive and good communication skills
- Experience in leading work teams, preferably multidisciplinary
- Experience in nanomaterials synthesis using porous alumina membrane templates.
- Experience in laser applications on light metal alloys.
- Demonstrably fluent in English.

## 7. REPORT TO:

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

### **JOB REFERENCE: VTIT-AROB - 13**

### **KNOWLEDGE TRANSFER AREA: INDUSTRIAL ROBOTICS**

#### **1. CATEGORY:**

1 ASCETI post

#### **2. REQUIREMENTS**

- PhD in Engineering.
- Demonstrable experience in implementing Robotics projects.

#### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CÁDIZ ITI

#### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in research and business projects related to robotics.

- Participate in planning projects to define specifications, architecture, design, development, trials and documentation for industrial robotics prototypes for the shipbuilding sector.
- Participate in planning projects to define specifications, architecture, design, development, trials and documentation for industrial robotics prototypes.
- Supervise doctoral theses on the subject of Robotics.
- Collaborate in producing research articles and communications for conferences regarding the field of robotics.

#### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Automation, Electronic, Architectural and Computer Network Engineering

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

#### **6. PREFERRED MERITS/PROFILE:**

The following will be valued:

- Demonstrable experience in designing and developing robots and robotic prototypes.
- Demonstrable experience in designing and developing robotic systems with regards to the mechanics, electronics and programming.
- Demonstrable experience in designing and developing electronic systems with sensor systems, motor control and actuators for robots.
- Experience in designing and developing mechanic systems for robots.
- Experience participating in R&D contracts with companies.
- Demonstrable experience in using printed circuit board prototyping machines and CNC and 3D machines.
- Only publications and communications related to robotics will be valued.
- Only courses related to robotics will be valued.
- Demonstrably fluent in English (and B2 level Spanish or native).
- Public and private funding obtained for research projects
- Proactive and good communication skills

#### **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

#### **JOB REFERENCE: VTIT-IDROB - 4**

#### **KNOWLEDGE TRANSFER AREA: INDUSTRIAL ROBOTICS**

#### **1. CATEGORY:**

1 Distinguished Researcher post

#### **2. REQUIREMENTS**

- PhD in Engineering with 15 years post-doctorate experience.
- Previous research in the field of Robotics and demonstrable experience in implementing Robotics projects:
  - In designing and developing robots and robotic prototypes.
  - In designing robotic systems with regards to the mechanics, electronics and programming.

- In designing and developing electronic systems with sensor systems, motor control and actuators for robots.
- In designing and developing mechanic systems for robots.
- Research project management related to the subject matter of the contract.
- Participation in robotics projects with industry and companies.
- Previous experience in supervising doctoral theses on robotics.

### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in existing innovation projects with the industry to develop work in the field of Robotics.
  - Team leadership and strategy design.
- Supervise doctoral theses on the subject of Robotics. You will be assigned a pre-doctoral intern.

### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Automation, Electronic, Architectural and Computer Network Engineering

Salary: Gross annual salary of €100,000

### **6. PREFERRED MERITS/PROFILE:**

The following will be valued:

- Articles related to the subject matter of the contract and published in Q1 JCR-cited journals.
- Public and private funding obtained for research projects
- Participation in international projects in the field of Robotics.
- Good communication skills and proactive
- Experience in leading work teams, preferably multidisciplinary
- Experience gained in stays at relevant industry or technological research centres carrying out activities in the field of robotics.
- Experience participating in R&D contracts with companies.
- Demonstrably fluent in English (and B2 level Spanish or native).

### **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

**JOB REFERENCE: VTIT-AFA-14**

**KNOWLEDGE TRANSFER AREA: ADDITIVE MANUFACTURING**

### **1. CATEGORY:**

1 ASCETI post

## **2. REQUIREMENTS**

- PhD in Engineering or Sciences.
- Fluent in English
- Demonstrable experience in additive manufacturing projects.

## **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

## **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
- Collaborate in research and business projects related to *"Developing additive manufacturing materials and technologies for the industry"*.
- In this line of activity:
  - Participate in planning projects.
  - Supervise doctoral theses. You will be assigned a pre-doctoral intern.
  - Supervise research work.
  - Collaborate in producing research articles and communications for conferences.

## **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: Faculty of Science, Department of Materials Science, Metallurgical Engineering and Inorganic Chemistry.

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

## **6. PREFERRED MERITS/PROFILE:**

The following will be valued:

- Knowledge and demonstrable experience in developing polymer-based nano/micro compounds, metallic alloys and other materials relevant to their use in additive manufacturing.
- Knowledge and demonstrable experience in developing and applying additive manufacturing technologies, with a special emphasis on large-format technologies.
- Knowledge and demonstrable experience in simulating additive manufacturing processes.
- Knowledge and experience in industrial materials science and engineering.
- Knowledge and experience in designing and developing prototypes and products.
- Participation in projects and contracts with additive manufacturing R&D companies.
- Publications and communications related to the subject matter of the contract.
- Public and private funding obtained for research projects

- Proactive and good communication skills

## **7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.

## **JOB REFERENCE: VTIT-AERM-15**

## **KNOWLEDGE TRANSFER AREA: MARINE RENEWABLE ENERGY, SHIPBUILDING AND ELECTRICAL ENGINEERING**

### **1. CATEGORY:**

1 ASCETI post.

### **2. REQUIREMENTS**

PhD in Industrial Engineering or Shipbuilding Engineering

Demonstrable experience in marine renewable energy projects.

### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:

- Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
- Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.

- Supervise doctoral theses on the subject of Marine Renewable Energies. You will be assigned a pre-doctoral intern.

### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: Marine Research Institute (INMAR)

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

### **6. PREFERRED MERITS/PROFILE:**

-Have proven technological experience in designing marine energy converters: Marine currents, wave and off-shore wind.

-Experience testing the behaviour of marine energy converters in the sea.

-Experience handling the recording system for hydrodynamic and atmospheric conditions which affect the behaviour of the converters.

-Experience in designing and building floating, submerged and semi-submerged structures and their seabed anchoring systems.

-Be an author or co-author of publications in prestigious journals in the

aforementioned fields.  
- Demonstrably fluent in English.

## **7. REPORT TO:**

Vice-Chancellor of Knowledge Transfer and Technological Innovation.

**JOB REFERENCE: VTIT-AEB-16**

**KNOWLEDGE TRANSFER AREA: SHIPBUILDING ENGINEERING**

### **1. CATEGORY:**

1 ASCETI post.

### **2. REQUIREMENTS**

PhD in Shipbuilding Engineering

Previous experience in shipbuilding projects (design and ship manufacturing, floating artefacts and their components).

### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
- Supervise doctoral theses on the subject of the contract. You will be assigned a pre-doctoral intern.

### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: Marine Research Institute (INMAR) and School of Naval and Ocean Engineering.

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

### **6. PREFERRED MERITS/PROFILE:**



- Demonstrable experience in designing and manufacturing ships and floating artefacts.
- Demonstrable ability to use English correctly both in spoken and written form.
- Public and private funding obtained for research projects
- Proactive and good communication skills

## **7. REPORT TO:**

Vice-Chancellor of Knowledge Transfer and Technological Innovation.

## **JOB REFERENCE: VITI-ADEE-17**

## **KNOWLEDGE TRANSFER AREA: ELECTRONIC EQUIPMENT DESIGN**

### **1. CATEGORY:**

1 ASCETI post

### **2. REQUIREMENTS**

- PhD in Engineering.
- Demonstrable previous experience in designing electronic equipment.

### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
  - Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
  - Collaborate in research and business projects related to electronic products and electronic equipment production.
- Participate in planning projects to define specifications, architecture, design, development, trials and documentation for electronic prototypes and electronic equipment.
- Supervise doctoral theses relevant to new electronic equipment and electronic developments. You will be assigned a pre-doctorate intern.
- Codirect research work relevant to the topic of new electronic equipment and electronic developments.
- Collaborate in producing research articles and communications for conferences relevant to new electronic equipment and electronic developments.

### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: School of Engineering, Department of Automation, Electronic,

Architectural and Computer Network Engineering

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

#### **6. PREFERRED MERITS/PROFILE:**

Proven and verifiable experience will be valued in:

- Digital and analogical electronic circuit design.
- Electronic equipment design.
- Electronic sensors design.
- Electronic circuit design with microcontroller and microprocessor systems; and built-in computers.
- Electronic system design and development with sensor systems, motor control and actuators.
- Electronic product and electronic equipment design.
- Printed circuit board design and development.
- Use of electronic prototyping machines for developing printed circuit boards.
- Experience participating in R&D contracts with companies.
- Only publications and communications related to the development and design of electronic systems will be valued.
- Only courses related to designing electronic systems will be valued.
- Demonstrably fluent in English and B2 level Spanish (or native).

#### **7. REPORT TO:**

Vice-Chancellor of Knowledge Transfer and Technological Innovation.

#### **JOB REFERENCE: VITI-AEEI-18**

#### **KNOWLEDGE TRANSFER AREA: ENERGY SAVING AND EFFICIENCY IN THE INDUSTRY**

#### **1. CATEGORY:**

1 ASCETI post

#### **2. REQUIREMENTS**

- Industrial Engineering (speciality in mechanic or chemical engineering)
- PhD in Engineering
- Proven previous experience in energy saving and efficiency in the industry (design, maintenance, monitoring and management).

#### **3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

#### **4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:
  - Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.

- Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.
- Collaborate in research and business projects related to electronic products and electronic equipment production.
- Activity related to energy saving and efficiency in the industry (design, maintenance, monitoring and management):
  - ✓ Collaborate in research and technology transfer projects with companies.
  - ✓ Collaborate in editing research project proposals nationally and internationally.
  - ✓ Co-supervise doctoral theses. You will be assigned a pre-doctoral intern.
  - ✓ Codirect research work, masters dissertations.
  - ✓ Collaborate in producing research articles and communications for conferences.
  - ✓ Collaborate in training seminars within the working group.

### **5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: Polytechnic School of Algeciras. Department of Thermal Machines and Motors.

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

### **6. PREFERRED MERITS/PROFILE:**

Proven and verifiable experience will be valued in the following activities which are directly related to energy saving and efficiency in the industry (design, maintenance, monitoring and management):

- Team design and management; and industrial thermal processes.
- Participation in research projects (on a regional, national or international level).
- Participation in technology transfer contracts with companies.
- JCR indexed publications and communications given at conferences related to the profile of the post:
- Verifiable activity related to using numerical methods in heat transfer and fluid dynamics (ANSYS-CFX or FLUENT).
- Verifiable activities related to programming in c++/java languages.
- Demonstrably fluent in English (and B2 level Spanish if candidate is foreign).

### **7. REPORT TO:**

Vice-Chancellor of Knowledge Transfer and Technological Innovation.

**JOB REFERENCE: VITI-APR-19**

**KNOWLEDGE TRANSFER AREA: FORMAL TOOLS FOR BIG DATA**

**1. CATEGORY:**

ASCETI.

**2. REQUIREMENTS**

PhD in Computer Science or in Mathematics

At least five years experience post defending doctoral thesis

Previous verifiable experience in projects with formal tools for Big Data.

**3. PROJECT/AGREEMENT/CONTRACT:**

ATTRACTING TALENT PROGRAM LINKED TO THE ANDALUSIA INNOVATION STRATEGY IN CÁDIZ AND TECHNOLOGICAL INNOVATION INITIATIVES FROM THE CADIZ ITI

**4. ACTIVITIES TO BE UNDERTAKEN:**

- Following guidelines from the Program manager:

- Be involved in developing lines of research and innovation which are strategic for the UCA and highly demanded by the province's business sector's innovation needs.
- Join interdisciplinary and mixed university/industry research/innovation groups aimed at developing projects in collaboration with the University of Cadiz business community.

- Supervise doctoral theses relevant to the subject of the contract. You will be assigned a pre-doctoral intern.

- Resolve current industry problems using formal tools.

- Get involved in multidisciplinary research/innovation groups which are working with companies in the province on predictive analysis of productive processes.

**5. CONTRACT FEATURES:**

Duration: Contract for four years, renewable annually depending on objectives achieved.

Working Hours: Full Time. The Duration of the working day, schedules, bank holidays, leave and other holidays will be the same as those respected for full-time teaching and research staff.

Location: Faculty of Science, Mathematics Department.

Salary: Gross annual salary of €52,000 From the second year, annual supplement for productivity incentives from the previous year of €3,000 gross each year, subject to favourable annual assessment of research/innovation activity.

**6. PREFERRED MERITS/PROFILE:**

Experience in predictive analysis for productive processes.

Fuzzy logic programming skills.

Experience gained in stays at internationally prestigious centres in the field of fuzzy logic and which have had prior experience with companies.

Work experience in international centres, with experience in working with companies.

Participation in innovation projects related to information processing using logic programming, mainly those executed with companies or whose results have been applied in the industry.

Advanced knowledge of programming languages and machine learning.

**7. REPORT TO:**

Vice-Chancellor for Knowledge Transfer and Technological Innovation.