



## **INTERNAL QUALITY ASSURANCE SYSTEMS OF UNIVERSITY EDUCATION AT THE UNIVERSITY OF OVIEDO**

Vicechancellorship of Teachers, Departments and Centres. University of Oviedo

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### **Abstract**

The Quality unit of the Vicechancellorship of Teachers, Departments and Centres has developed a System for the Internal Quality Assurance of University Education (SIQA), in cooperation with the National Quality Assessment and Accreditation Agency (ANECA). The participant centres are the Faculty of Medicine, The Faculty of Philology and the Higher Polytechnic School of Engineering of Gijón.

Within the European Higher Education framework, quality assurance systems have two basic objectives:

- Providing university learning centres with guidance / tools for the design of Internal Quality Systems for the degrees they offer.
- Implementing a procedure leading to the approval of such systems by external quality assurance agencies.

The study develops a model to allow University of Oviedo learning centres to guarantee that their activities are in the right direction to achieve the aims associated with the teaching provided.

### **Keywords:**

Accreditation, Continuous Improvement, Quality Assurance, System for the Internal Quality Assurance of University Education.



## 1. Premises and background.

The Sorbone Declaration, 1998, and the Bologna Declaration, 1999, signed jointly by the European ministers of education, initiated a process aiming at the promotion of European Convergence between national educational systems so as to create a European Space for Higher Education before 2010, with the basic organizational principles of:

- **Quality**
- Mobility
- Diversity
- Competition

The basic convergence aims are: the establishment of a credit system, the adoption of a teaching system based mainly on two cycles, with degrees that provide qualification for insertion in the labour market, together with the setting up of a European Degree Supplement and **the assessment of quality levels** (*Ferrer, 2006*).

The eventual support for the integration of the Spanish University system in the European Space for Higher Education came with the passing of the decree (parliamentary act) 1125/2003, providing regulation for the European credit system and grading system for university degrees, complemented by the subsequent decrees 55/2005, 56/2005 and 1509/2005, which established a structure for university education by officially implementing Graduate and Postgraduate degrees.

The University Organic Law (LOU) 4/2007 determines the need for common quality assurance criteria so as to facilitate **the assessment, certification and accreditation of the educational programmes which lead to obtaining official degrees, valid throughout the national territory**. In accordance with article 37 of Law 4/2007, the decree 1393/2007 establishes the new regulation framework for the **organization, verification and accreditation** of official university programmes within Spain (*Chacón, 2006*), (*Rauret, 2007*).

### Currently existing mechanisms for quality assurance (*Coba, 2007*).

Regarding programme quality assessment, the University of Oviedo has taken important steps through its participation in Institutional Assessment plans and programmes as well as through the implementation of other teaching quality control procedures, by means of a General Teaching Survey (*Fernández Rico, 2006*). The chart below reflects the details of the participation of our university in different assessment programmes.

Academic Year	Official denomination	Promotional Organism
1996/97	Pilot scheme	Council of Spanish Universities (Consejo de Universidades Españolas)
1999/00	Plan Nacional de la Calidad de las Universidades (PNECU)	
2000/01	(National Plan for University Quality Assessment)	
2001/02	Plan de la Calidad de las Universidades (PNECU)	University Coordination



Academic Year	Official denomination	Promotional Organism
2002/03	(Plan for University Quality Assessment)	Council (CCU)
2003/04	Institutional Assessment Programme (PEI) <i>The Accreditation Pilot Programme was carried out during the 2003/04 academic year.</i>	National Agency for University Quality (ANECA)
2004/05		
2005/06		
2006/07		

95% of the degrees of the University of Oviedo have been evaluated. This institution has also participated in other activities promoted by the ANECA, such as the Quality Certification of University Library Services and the Doctoral Programme Evaluation aiming at the achievement of a “Quality Award” (Mención de Calidad). The University of Oviedo has received “Quality Awards” for 19 of its Doctoral Programmes in the last few years.

Quality Technical Units (UTCa) work in the promotion of continuous improvement (*Ariño, Boullosa, 2007*). The Quality Technical Unit of the University of Oviedo obtained the certification for its Quality Management System by the ISO norm 9001:2000 on 21<sup>st</sup> July 2005, and its renewal on 9<sup>th</sup> July 2008.

One of the aims of this Unit is to provide support for the development of Quality Management and Quality Assurance systems, with the result that several of its units have obtained different kinds of quality recognition:

Unit	Recognition / Reference Norm	Institution
Higher Naval School	<i>Adaptation of the ISO norm 9000:1994 to the guidelines of norm UNE-EN ISO 9001:2000</i>	LLOYD’S <sup>1</sup>
Mechanical Engineering Area	<i>ISO 9001:2000 Certificación.</i>	AENOR <sup>2</sup>
Masters degree in Orthodontics and Dentofacial Orthopedics	<i>ISO 9001:2000 Certificación.</i>	AENOR
Slot machine Trial and Test Centre	<i>UNE-EN ISO/IEC 17025:2005 Accreditation.</i>	ENAC <sup>3</sup>
Institute for Natural Resources and Territorial Regulation (INDUROT)	<i>ISO 9001:2000 e ISO 14001:2004 Certification.</i>	AENOR
University of Oviedo Foundation (FUO)	<i>ISO 9001:2000 Certification.</i>	AENOR

The Administration and Services Staff also receive training on quality while other University Services (such as the library) receive support for the setting up of Quality Management Systems based on procedural approach.

<sup>1</sup> LLOYD’S – (LRQA) – Lloyd’s Registrar Quality Assurance

<sup>2</sup> AENOR – Asociación Española de Normalización y Certificación

<sup>3</sup> ENAC – Entidad Nacional de Acreditación y Certificación



## 2. Methodology.

AUDIT<sup>4</sup> is a programme developed by ANECA, in cooperation with the agencies AQU<sup>5</sup> and ACSUG applied to university institutions, which are considered as reference organizational environments.

The development of an Internal Quality Assurance System is based on the continuous improvement cycle of University Education (*Blaya, 2007*):

1. Establishing formative policies and processes.
2. Implementing learner-centred formative processes.
3. Formative process monitoring and measurement.
4. Decision making geared towards educational improvement on the basis of the results of the learning process, labour insertion and satisfaction levels.



*Deming Continuous Improvement Cycle*

Which is developed in the following stages:

- IQAS design by university learning centres supported by guidelines.
- Sanctioning of the design by the external guaranty agencies (though currently we are talking about evaluation rather than sanctioning).
- Certification and implementation of IQAS by the certifying organizations.

The first national series of the AUDIT programme summoned 135 participant learning centres from 62 universities. 43 of the 62 participant universities – which amounts to 84% of the total number of universities in Spain – were public and 19 of them were private.

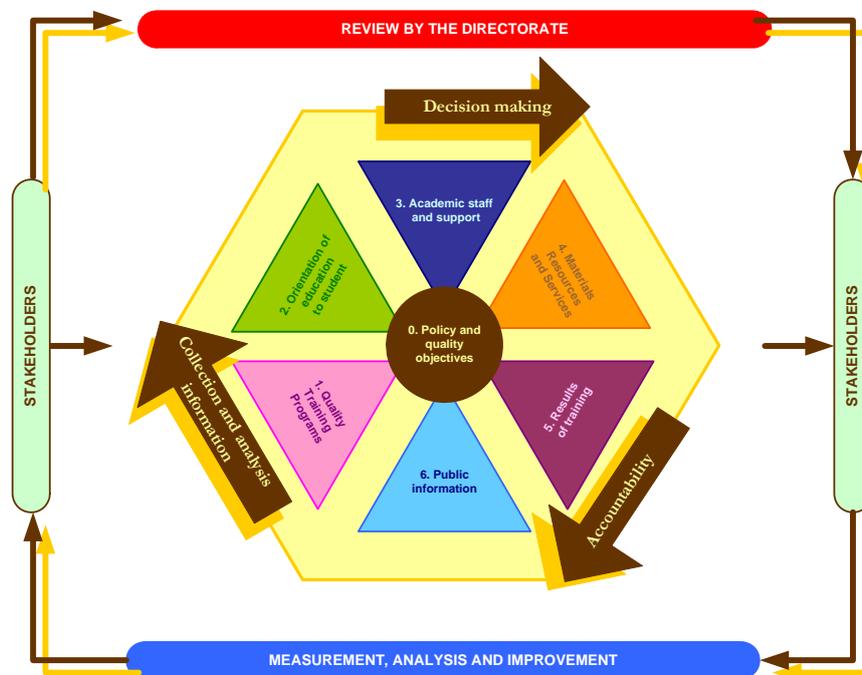
<sup>4</sup> AQU - Agency for Quality Assurance in the Catalan University System / ACSUG - Agency for Quality Assurance in the Galician University System.

<sup>5</sup> The term AUDIT chosen to define this program, comes from the Latin Word “audire” (listen) and it is frequently used in Europe in order to refer to Processes of Quality Assessment in University Institutions.



## IQAS design in the University of Oviedo's learning centres.

Stage	Description
<b>COMPROMISE</b>	The compromise of the University of Oviedo towards the development of Internal Quality Assurance Systems (IQAS) of university education, by the Quality Technical Unit within the framework of the AUDIT programme, is registered in the agreement <sup>6</sup> established with ANECA, with the participation of three learning centres: the Faculty of Medicine, the Faculty of Philology and the Higher Polytechnic School of Engineering.
<b>PLANNING</b>	Allocation of quality technicians to each learning centre. Revision of deadlines established by ANECA. Design of a meeting calendar under specific guidelines. Informative meeting with the heads of each centre. Approval by the learning centres.
<b>DIAGNOSIS</b>	Revision of the degree of compliance with the different elements that a IQAS should include by means of a checklist, following the provision of documented evidence either by the learning centre or through its writing up by the Technical Unit.
<b>DEFINITION AND DOCUMENTATION</b>	Once the aims and scope of the IQAS have been determined, based on the accomplished diagnosis, the definition and documentation stage started with the result of the issuing of a IQAS manual for each centre (General Information about the University of Oviedo, General Information about the centre, Applicable Regulations and Norms, IQAS Organization, Responsibility of the Centre's Managing Board, Resource Management, Service Provided, Measurement, analysis and improvement and a History of versions of the IQAS manual). The process map on the next page, which is applicable to all the centres, graphically illustrates the main elements to bear in mind in the development of IQAS.



*University of Oviedo IQAS process map*

<sup>6</sup> According to Appendix II of 2007 Announcement signed by the ANECA Director, the Vice-chancellor of the University of Oviedo, and the Deans / Headmasters of the centres taking part in the program.



Seven guidelines have been designed with their corresponding procedures and records:

**Guideline 1.0 How the learning centre defines its Quality Policy and Aims.**

- Quality Policy and Aims definition procedure. E.g. Record: Quality Political Minutes

**Guideline 1.1 How the learning centre achieves Quality Assurance for its educational programmes.**

- Educational programme quality assurance procedure. E.g. Record: Programme guidebook.

**Guideline 1.2 How the centre achieves learner-centred orientation.** (*García, 2007*).

- Profile definition process and student admission.
- Student orientation and learning development procedure.
- Student management and mobility procedure.
- Management and professional orientation procedure.
- Work-placement management procedure.
- Management procedure of incidents, complaints and suggestions. E.g. Record: 0-course planning and satisfaction.

**Guideline 1.3 How the centre assures and improves academic staff quality levels.**

- Procedure towards the definition of academic / administrative staff policies.
- Procedure towards the selection and recruitment of academic / administrative staff.
- Academic / administrative staff training procedure.
- Academic / administrative staff assessment, promotion and recognition procedure. E.g. Record: Training activity planning and development.

**Guideline 1.4 How the centre manages and improves its material resources and services.**

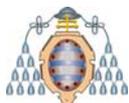
- Material resources management procedure.
- Service management procedure. E.g. Record: List of Approved Suppliers.

**Guideline 1.5 How the centre analyses and applies results.**

- Result analysis procedure. E.g. Record: The centre's Assessment Report.

**Guideline 1.6 How the centre issues published information about its degrees.**

- Degree Information Publishing procedure. E.g. Record: Communication Plan.



The design stage of the Internal Quality Assurance System was supervised by the head of the Quality Technical Unit, who held weekly meetings with the technical staff assigned to each of the three participant centres.

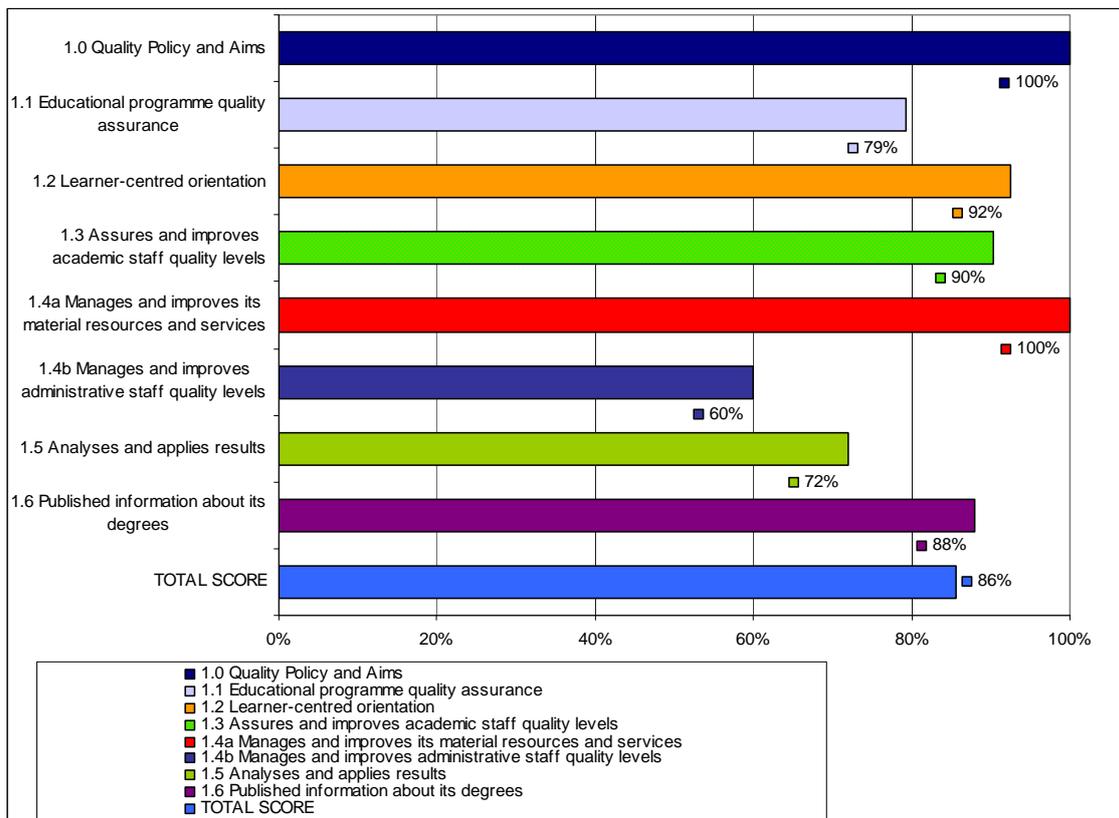
The Quality Technical Unit documented the AUDIT programme according to a process approach based on the requirements of the ISO norm 9001:2000 with a horizontal process line which presents the procedures, record formats and related indicators vertically.

A "Road map" was designed to reflect the compliance with the different activities and a set of indicators was established to carry out the monitoring and measurement of the process.

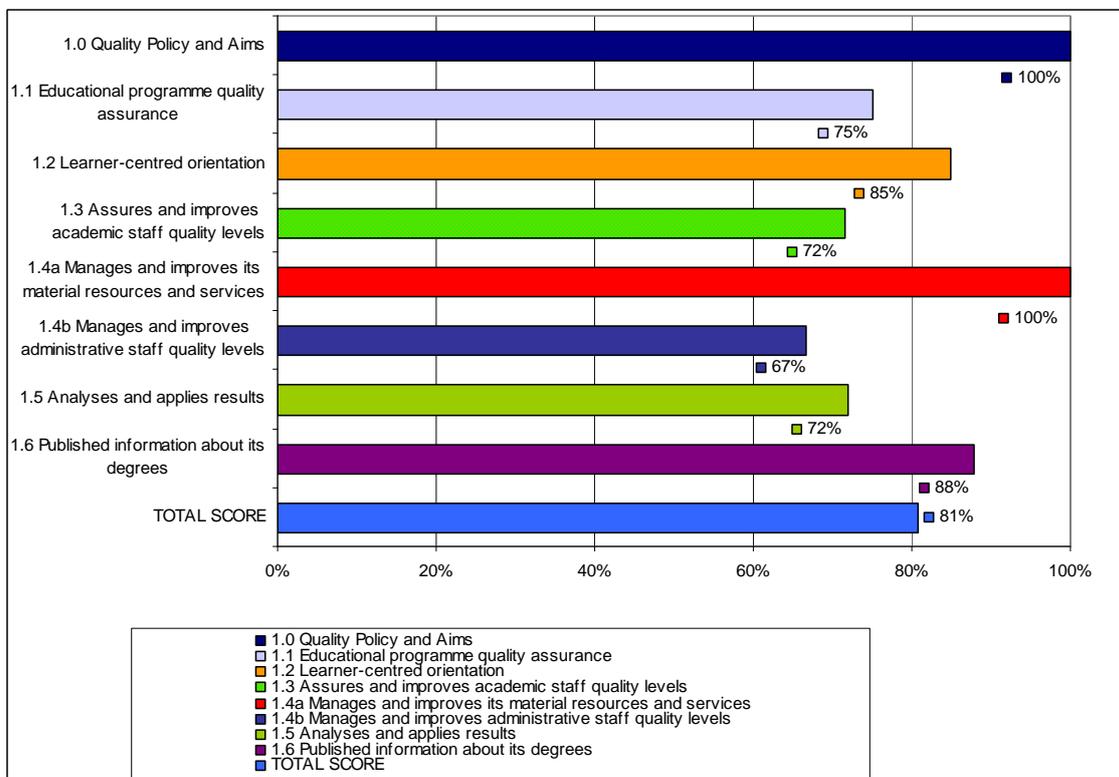
- % A and B in the checklist (Centre Internal Quality Assurance System design assessment protocol).
- % Positive reports.

The chart below illustrates the results of the diagnosis stage in one of the learning centres, the Faculty of Medicine, by means of a checklist sample and a graph with the individual, as well as the total, results for each guideline:

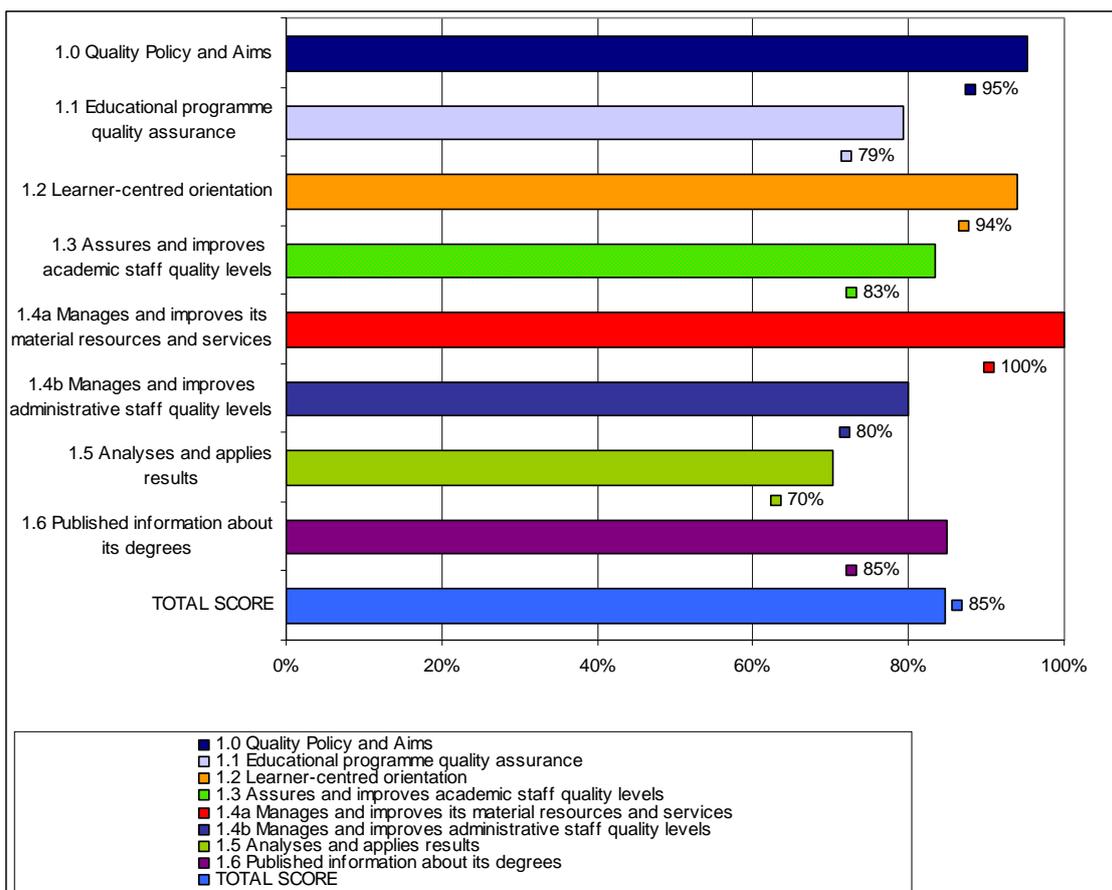
<b>GUIDELINE</b>	<b>Learner-centred degree orientation</b>			
<b>Procedure</b>	<b>Definition of entry/graduation admission and enrolment student profiles.</b>			
<b>Elements</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Presence of regulating mechanisms which can guarantee the decision making process regarding the definition of entry/graduation profiles as well as the admission and enrolment criteria.		X		
Presence of information collection and analysis systems which allow insights and assessment of the needs concerning entry/graduation profiles, and admission and enrolment criteria.	X			
Specification of the ways in which the interest groups are involved in the design and development of the definition of entry/graduation profiles, the admission and enrolment criteria.		X		
Existence of mechanisms which facilitate monitoring, revision and improvement in the definition of entry/graduation profiles, and admission and enrolment criteria.				X



*Faculty of Medicine Self-assessment.*



*Faculty of Philology Self-assessment.*

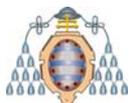


*Gijón Higher Polytechnic School of Engineering Self-Assessment.*

Faculty of Medicine Self-assessment	Faculty of Philology self-assessment	HPS of Engineering self-assessment
86 %	81 %	85 %

The meetings between the quality technicians and the managing boards of the learning centres took place without incident. The aim of the meetings was to approve of the changes in the guidelines and to revise the proposals for delayed guidelines.

Currently, after the documents have been sent to ANECA through the Web application, the first series of the programme is in the evaluation stage; which is very important since it assures the quality of the design of Internal Quality Assurance Systems of university education (IQAS) proposed by the learning centres. The evaluation commissions are responsible for the assessment of the IQAS design on the basis of the documentation collected and the subsequent compliance with an evaluation protocol.



### 3. Results

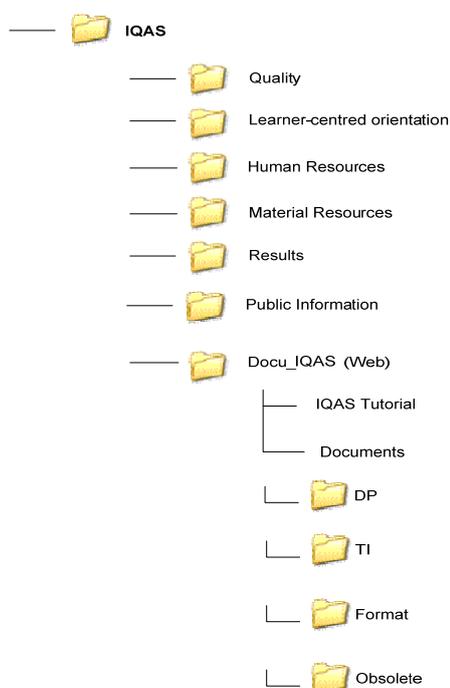
The Quality Technical Unit of the University of Oviedo, in cooperation with ANECA, has participated in the AUDIT programme by developing the Internal Quality Assurance Systems (IQAS) in the following learning centres:

- Faculty of Philology
- Faculty of Medicine
- Gijón Higher Polytechnic School of Engineering (GHPSE)

As a means of facilitating a more dynamic operation, an Innovative Management Tool was applied, which allowed the management of all the information during the process so that the participants from the centres could look up and operate on any working document.

	Joint	Medicine	Philology	GHPSE
Meetings	5 27/11-21/01	9 29/10-21/01	8 29/10-21/01	10 29/10-11/02
Procedures	17			
Reccords		29	25	27

The system's documentation is organized according to the following folder structure:



*Folder structure for the IQAS documentation in the IT application.*



In a third stage, the AUDIT programme will allow the conclusion of the **certification process of the IQAS enforced by the learning centres**. The procedure to carry out the certification process will be reflected in the IQAS certification guidebook.

All the issues considered throughout the AUDIT programme are part of the requirements established by the programme VERIFICA (Criterion 9 of the Degree Quality Assurance System), which will tend to the regulation requirements of authorization and register of Graduate and Masters Degrees. Thus, all the efforts will become aligned and participation of the universities in the sanctioning of the future degrees will be fostered.

## 4. Conclusions.

Internal Quality Assurance Systems have become a key tool to verify the effective improvement of the new degrees as well as their adaptation to the requirements of the European Space for Higher Education.

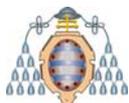
Once the IQAS have been implemented, the diversity of the centres in structure and functions has become evident. Therefore, it is advisable to define a unique model for the university as a whole, where the competences assigned to the IQAS are clearly specified, by defining strategic guidelines, homogenous aims and procedures for all the degrees, in such a way that a quality standard is guaranteed which can, in the future, facilitate certification and accreditation.

IQAS development should not be merely focused on the formal compliance with protocols and documents established in the 1393/2007 decree, but should adapt to the learning centres so as to facilitate their actual implementation, so that an adequate response is given to all the needs and difficulties identified, minimising bureaucracy and unnecessary technical terms in the documents, and offering solutions for the requirements of the new degrees.

The final aim of any Internal Quality Assurance System is to provide answers to the current and future demands of the social and labour network.

## 5. Bibliography.

- AENOR (2000). *Norma ISO 9001:2000. Sistemas de Gestión de la Calidad. Requisitos*. Madrid. Asociación Española de Normalización y Certificación
- AENOR (2005). *Norma ISO 9000:2005. Sistemas de Gestión de la Calidad. Fundamentos y vocabulario*. Madrid. Asociación Española de Normalización y Certificación
- ANECA 2007. *Guía para el diseño de Sistemas de Garantía Interna de la Calidad de la formación universitaria*. Madrid. Agencia Nacional de Evaluación de la Calidad y Acreditación.
- ANECA 2007. *Directrices para el diseño de los Sistemas de Garantía Interna de Calidad de la formación universitaria*. Madrid. Agencia Nacional de Evaluación de la Calidad y Acreditación.



- ANECA 2007. *Guía de Evaluación del diseño de Sistemas de Garantía Interna de Calidad de la formación universitaria*. Madrid. Agencia Nacional de Evaluación de la Calidad y Acreditación.
- ANECA 2007. *Protocolo de evaluación para la verificación de títulos universitarios oficiales (Grado y Máster)*. Madrid. Agencia Nacional de Evaluación de la Calidad y Acreditación.
- ARIÑO, A y PEREZ, A. (2007). “El papel de las unidades técnicas de calidad en los Sistemas de Garantía de Calidad de la universidad *Sistemas de garantía de calidad de las enseñanzas universitarias: El papel de las unidades técnicas de Calidad*. Universidad de Valencia.
- BLAYA SALVADOR, I (2007). “Marco para la gestión de calidad: experiencias y lecciones aprendidas” *Cultura de calidad en la Educación Superior en Europa*, Universidad Miguel Hernández.
- CHACON, P. (2006). “De la evaluación de las titulaciones a la acreditación del grado y postgrado” *Encuentro 10 años de evaluación de la calidad en las universidades españolas: 1996 – 2006. Resultados y objetivos*. Jaca.
- COBA, E. (2007). “Sistema de Garantía de Calidad en la Educación Superior en España” *Cultura de calidad en la Educación Superior en Europa*, Universidad Miguel Hernández.
- EME (199). *Declaración de Bolonia de 19 de junio de 1999*. Joint declaration of the European Ministers of Education.
- FERNANDEZ RICO, J. E. (2006). “Lecciones aprendidas por las Universidades en X años de evaluación institucional” *.De la evaluación para la mejora a la acreditación de titulaciones e instituciones, VIII Foro de Almagro*.
- FERRER, L. (2006) “El papel de las Universidades en la garantía de Calidad”. *La aplicación de los criterios para la Garantía de Calidad en el Espacio Europeo de Educación Superior. Una propuesta de futuro*. Universidad Internacional Menéndez Pelayo. Universidad Autónoma de Barcelona.
- GARCIAL, E. (2007) “Cómo el centro orienta la calidad de sus enseñanzas a los estudiantes”, *La participación de los estudiantes en la evaluación de la calidad*, Universidad Internacional Menéndez Pelayo.
- GUTIERREZ-SOLANA SALCEDO, F. (2006). “El protagonismo de las universidades. Los Indicadores como motor de la Aplicación de los Criterios para la Garantía de Calidad en el EEES” *La aplicación de los criterios para la Garantía de Calidad en el Espacio Europeo de Educación Superior. Una propuesta de futuro*. Universidad Internacional Menéndez Pelayo. Universidad Autónoma de Barcelona.
- MEC (2003). *La integración del sistema universitario español en el Espacio Europeo de Enseñanza Superior*. Madrid. Ministerio de Educación, Cultura y Deporte.
- MEC, (2005). *Real Decreto 55/2005, de 21 de enero, por el que se establece la estructura de las enseñanzas universitarias y se regulan los estudios universitarios oficiales de Grado*. Madrid. Ministerio de Educación y Ciencia



- MEC, (2005). *Real Decreto 56/2005, de 21 de enero, por el que se regulan los estudios universitarios oficiales de Posgrado*. (Modificado por Real decreto 1509/2005). Madrid. Ministerio de Educación y Ciencia
- MEC, (2007). *Ley Orgánica 4/2007, de 12 de abril, por la que se modifica la Ley Orgánica 6/2001, de 21 de diciembre, de Universidades*. Madrid. Ministerio de Educación y Ciencia
- MEC, (2007). *Real Decreto 1393/2007, de 29 de octubre, por el que se establece la ordenación de las enseñanzas universitarias oficiales*. Madrid. Ministerio de Educación y Ciencia
- RAURET, G. (2007) “Los Sistemas de Garantía de Calidad en la Universidad”, *Sistemas de garantía de calidad de las enseñanzas universitarias: El papel de las unidades técnicas de Calidad*, Universidad de Valencia.