

**COURSE DATA****Data Subject**

Code	44395
Name	Information technology and computer systems
Cycle	Master's degree
ECTS Credits	4.5
Academic year	2022 - 2023

Study (s)

Degree	Center	Acad. year	Period
2206 - M.U. en Contabilidad, Auditoría y Control de Gestión	Faculty of Economics	1	Second term

Subject-matter

Degree	Subject-matter	Character
2206 - M.U. en Contabilidad, Auditoría y Control de Gestión	4 - Control and diffusion of financial information	Obligatory

Coordination

Name	Department
HUGUET BENAVENT, DAVID	44 - Accountancy

SUMMARY

The subject of **information technologies and computer systems** analyzes the evolution of traditional communication model of information between companies and users of financial information, identifying the consequences of the policy of corporate disclosure. Defines the nature and characteristics of digital financial information, examining the practices used by companies and the regulatory scope of that information, analyzing the levels of disclosure of corporate information on the websites of the companies. XBRL taxonomies developed in the field of accounting information, proposing and developing methodologies for certification and auditing of digital corporate information are analyzed. strategy, architecture, design and management of IT processes in companies is also studied; control processes information technology; knowledge, skills and risk assessment; the role of computer security in organizations; principles and means. Error detection and prevention.



The **faculty** in charge of teaching in this subject are:

Dr. Juan Luis Gandía Cabedo, Professor, Department of Accounting.

Dr. David Huguet Benavent, Associate Professor, Department of Accounting.

Ms. María Dolores Ferrer, ROAC Auditor, Aznar Textil.

Mr. Carlos Luis González Amat, ROAC Auditor, KPMG.

Ms. Esther Llorca Pons, eZeria Consulting.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

No other requirements are described.

OUTCOMES

2206 - M.U. en Contabilidad, Auditoría y Control de Gestión

- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.
- Students should possess and understand foundational knowledge that enables original thinking and research in the field.
- Have critical and self-critical capacity.
- Capacidad de búsqueda de información, análisis y síntesis.
- Capacidad de adaptación a nuevas situaciones y de resolución de problemas.
- Capacidad de organización y planificación del trabajo y los recursos.
- Capacidad de asumir responsabilidades y esfuerzo.



- Capacidad de comunicación.
- Ser capaz de evaluar y cuantificar los niveles de revelación de información corporativa digital que difunden las compañías. Diseñar y estructurar un modelo de divulgación de información corporativa digital. Analizar y desarrollar taxonomías XBRL. Desarrollar un modelo de análisis básico a partir de un repositorio de información en XBRL. Establecer y analizar modelos de certificación y auditoría para información corporativa digital de las compañías. Identificar y analizar los diferentes aspectos que configuran la responsabilidad social corporativa. Conocer los cambios que se han producido en las compañías por la adopción de políticas de responsabilidad social, entre los que se encuentran la adopción de códigos éticos y la adopción de las recomendaciones del código de buen gobierno. Conocer las principales características de la información de sostenibilidad y muy especialmente las de las memorias de sostenibilidad elaboradas siguiendo las directrices de la Guía de la Global Reporting Initiative (GRI).

LEARNING OUTCOMES

As learning outcomes of this course, the student will be able to:

- Identify and analyze the requirements to be fulfilled by digital financial information.
- Assess and measure the levels of disclosure of the digital corporate information.
- Analyze and develop XBRL taxonomies.
- Establish and analyze certification and auditing models for digital corporate information.
- Examine the strategy, architecture, design and management of accounting information systems.
- Know, examine and assess the control of accounting information systems.
- Know the principles and tools of IT security in organizations.
- Detect errors in the information systems, and implement measures for their detection.

DESCRIPTION OF CONTENTS

1. Introduction: impact of information technology in the world

1. Impact of IT tools in the management of information.
2. Impact of Internet in disseminating the information.
3. Electronic commerce.

2. Information systems for the management of SMEs.

1. Office automation tools and systems services (servers, clouding).
2. Programs for accounting and billing.
3. Electronic Bill.
4. Electronic filing of accounting records and financial statements.

**3. Information systems for the management of large companies: ERP and Business Intelligence.**

1. Concept ERP (Enterprise Resource Planning).
2. ERP system configuration.
3. Concept of Business Intelligence.
4. Business Intelligence tools.

4. Management and dissemination of digital corporate information.

1. Corporate Web 1.0 and Web 2.0.
2. XBRL

5. Technological innovations and implications in the organizations' information systems

1. Certification of digital corporate information
2. Continuous auditing and artificial intelligence
3. Towards a Blockchain-based accounting ecosystem

6. Process control of information technology and computer security.

1. Introduction.
2. Internal Control of Information Systems.
3. Audit of the Daily Book.
4. Detection and prevention of errors.

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	25,00	100
Computer classroom practice	20,00	100
Attendance at events and external activities	13,50	0
Development of group work	8,50	0
Development of individual work	5,75	0
Study and independent work	5,75	0
Readings supplementary material	2,00	0
Preparing lectures	13,50	0
Preparation of practical classes and problem	16,00	0
Resolution of case studies	2,50	0
TOTAL	112,50	



TEACHING METHODOLOGY

MD1 - Group learning with the teacher. We use the model masterclass in lectures, offering the possibility to influence the most important of each theme, master exposure time, and present a specific way of working and dealing with different concepts. The participatory model will also be used in some theoretical issues and especially in practical classes, which is to prioritize communication between students and the teacher. The practical sessions will take the case method as a model because it encourages student participation both individually and as a group.

MD2 - Individual study. The student is directed in learning-oriented activities, so that student activity focuses on research, location analysis, handling, processing and return of information. The preparation work for the study of the subject will focus on it.

MD3 - Tutoring. Both individually and in groups to solve problems and direct jobs. You can use the platform "Aula Virtual" of the University of Valencia to maintain contact with the teacher.

MD4 - Group work with peers. The performance of work aims also to motivate the student in the research activity, apprehension and analysis of information, foster personal relationships, share problems, initiatives and solutions to work together. You will need to submit the proposed class work.

EVALUATION

SE1- Participation in class (debates, problem solving, presentation of works, among others): weighting 10%.

SE2 - Elaboration of papers and written reports: weighting 20%.

SE3 - Exam or test equivalent theoretical and practical nature: weighting 70%.

Continuous evaluation activities are not recoverable in this subject.

REFERENCES

Basic

- AECA [2002]: Código de buenas prácticas para la divulgación de la información financiera en Internet. Documento nº 1 de la Comisión de Nuevas Tecnologías y Contabilidad de AECA. Madrid.
- AECA [2003]: XBRL: un estándar para el intercambio electrónico de información económica y financiera. Documento nº 2 de la Comisión de Nuevas Tecnologías y Contabilidad de AECA. Madrid.
- AECA [2004]: Certificación y auditoría de la información digital. Documento nº 4 de la Comisión de Nuevas Tecnologías y Contabilidad de AECA. Madrid.



- AECA [2006]: Inteligencia artificial y contabilidad. Documento nº 5 de la Comisión de Nuevas Tecnologías y Contabilidad de AECA. Madrid.
- AECA [2012]: Información integrada: el cuadro integrado de indicadores (CII-FESG) y su Taxonomía XBRL. Documento nº 8 de la Comisión de Responsabilidad Social Corporativa. AECA, Madrid.
- AECA [2019]: La tecnología blockchain y sus implicaciones en el ámbito empresarial. Documento nº 15 de la Comisión de Nuevas Tecnologías y Contabilidad de AECA. Madrid.
- Gandía Cabedo, J.L. [2001]: La divulgación de información financiera en la era digital. Asociación Española de Contabilidad y Administración de Empresas. Madrid.
- Gandía Cabedo, J.L.; Andrés Pérez, T. [2005]: e-Gobierno corporativo y transparencia informativa en las sociedades cotizadas españolas: un estudio empírico. Dirección de Estudios. Comisión Nacional del Mercado de Valores (CNMV). Monografía nº 8.
- Gandía Cabedo, J.L. (2018): Tecnología, Contabilidad y Blockchain: Retos y Oportunidades para el Siglo XXI. Capítulo del libro Retos de la contabilidad y la auditoría en la economía actual: Homenaje al profesor Vicente Montesinos Julve, pp. 341-353.
- Material elaborado por los profesores de la asignatura
- Enlaces de interés:
 - www.xbrl.org (web sobre el lenguaje xbrl)
 - www.xbrl.es (Asociación XBRL España)
 - www.qlik.com (herramienta de business intelligence)
 - www.facturae.gob.es (factura electrónica)
 - www.cnmv.es (Comisión Nacional del Mercado de Valores)

Additional

- FASB [2000]: Electronic distribution of business reporting information. Steering Committee Report Series. Business Reporting Research Project. Financial Accounting Standards Board.
- Gandía Cabedo, J.L. [2005]: «Información corporativa y transparencia digital en las sociedades del IBEX-35». Cuadernos Aragoneses de Economía, vol. 15, págs. 243-274.
- Gandía, J.L.; Marrahí, L.; Huguet, D. (2016): «Digital transparency and Web 2.0 in Spanish city councils». Government Information Quarterly, 33 (1), 28-39.
- Lei, L.; Li, Y.; Luo, Y. (2019): «Production and dissemination of corporate information in social media: A review». Journal of Accounting Literature, 42, 29-43.
- Saxton, G. (2012): «New Media and External Accounting Information: A Critical Review». Australian Accounting Review, 22 (3), 286-302.
- Hall, J.A. (2016). Accounting Information Systems, 9th Edition