COURSE DATA

DATA SUBJECT

Code: 44395
Name: Information technology and computer systems
Cycle: Master's Degree
ECTS Credits: 4.5
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
2206 - Master's Degree in Accounting, Auditing and Management Control	Facultat d'Economia	1	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
2206 - Master's Degree in Accounting, Auditing and Management Control	Control and diffusion of financial information	COMPULSORY

COORDINATION

SENDRA PONS PAU

SUMMARY

The course on information technology and computer systems examines the evolution of the traditional communication model between companies and users of financial information, identifying the consequences of corporate disclosure policies. It defines the nature and characteristics of digital financial information, analyzing the practices used by companies and the regulatory environment surrounding such information. The course explores the levels of corporate disclosure on company websites. XBRL taxonomies developed in the field of accounting information are also studied, along with proposed and developed methodologies for the certification and auditing of digital corporate information. Additionally, the course addresses strategy, architecture, design, and management of information systems within companies; control of information technology processes; knowledge, competencies, and risk assessment; the role of cybersecurity within organizations; principles and tools; as well as error detection and prevention.

Faculty responsible for teaching this course:

Dr. Pau Sendra Pons, Assistant Professor, Department of Accounting
Ms. María Dolores Ferrer Verdeguer, Certified Public Auditor (ROAC), Aznar Textil
Mr. Carlos Luis González Amat, Certified Public Auditor (ROAC), 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.

COMPETENCES / LEARNING OUTCOMES

2206 - Master's Degree in Accounting, Auditing and Management Control

Capacidad de adaptación a nuevas situaciones y de resolución de problemas.

Capacidad de asumir responsabilidades y esfuerzo.

Capacidad de búsqueda de información, análisis y síntesis.

Capacidad de comunicación.

Capacidad de organización y planificación del trabajo y los recursos.

Have critical and self-critical capacity.

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).

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.

DESCRIPTION OF CONTENTS

1. Introduction: Impact of information technologies on the business world.

1. Impact of IT tools on information management.
2. Impact of the Internet on information dissemination.
3. Corporate information on Web 1.0 and Web 2.0.
4. Electronic commerce (e-commerce).

2. Information systems for SME management.

1. Office tools and system services (servers, cloud computing).
2. Accounting and invoicing software.
3. Electronic invoicing.
4. Electronic submission of accounting books and annual accounts.

3. Technological innovations and implications for business information systems.

1. XBRL technology.
2. Artificial intelligence and its implications for information systems.
3. Towards an accounting system based on blockchain technology.

4. Information systems for large enterprise management: ERPs and Business Intelligence.

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

5. Information process control and information security.

1. Introduction.
2. Internal control of information systems.
3. Audit of the General Journal.
4. Error detection and prevention.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	17,00
Computer classroom practice	28,00
Total hours	**45,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	13,50
Individual or group project	14,25
Independent study and work	7,75
Preparation of lessons	29,50
Preparation for assessment activities	0,00
Resolution of case studies	2,50
Total hours	**67,50**

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 ¿ Class participation (including debates, problem-solving, presentations, among others): weight 10%.

SE2 ¿ Preparation of written reports and assignments: weight 20%.

SE3 ¿ Theoretical-practical exam or equivalent test: weight 70%.

To pass the course, students must pass the final synthesis test, which requires a minimum score of 5 out of 10.

The minimum overall grade to pass the course is 5 out of 10, calculated by adding the score of the final synthesis test (provided that a minimum of 5 out of 10 has been achieved) to the grades obtained through continuous assessment activities.

Due to their nature, continuous assessment activities are non-recoverable in this course.

REFERENCES

- 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.
- 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.

- 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, 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.

- 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)

- Hall, J.A. (2016). Accounting Information Systems, 9th Edition