uc3m Universidad Carlos III de Madrid

Seminar series in Data Analytics in Auditing

Academic Year: (2019 / 2020) Review date: 03-05-2020

Department assigned to the subject:

Coordinating teacher: GARCIA LARA, JUAN MANUEL

Type: Electives ECTS Credits: 3.0

Year: 1 Semester: 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Financial Accounting IFRS I (or equivalent)
Financial Statements Analysis (or equivalent)
Auditing I (or equivalent)

OBJECTIVES

Basic competences

CB7 Students know how to apply their acquired knowledge and problem-solving skills in new or unfamiliar settings within broader (or multidisciplinary) contexts related to their field of study. CB8 Students are able to integrate knowledge and to face the complexity of making judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments.

CB9 Students know how to communicate their conclusions and the knowledge and ultimate reasons behind them to specialised and non-specialised audiences in a clear and unambiguous way. CB10 Students have the learning skills that will enable them to continue studying in a way that will be

largely self-directed or autonomous.

General competences

CG1 Ability to maintain continuous education after his/her graduation, enabling him/her to cope with new technologies.

CG2 Ability to apply the knowledge of skills and research methods related to engineering.

CG3 Ability to apply the knowledge of research skills and methods related to Life Sciences.

CG4 Ability to contribute to the widening of the frontiers of knowledge through an original research, part of which merits publication referenced at an international level.

CG5 Ability to perform a critical analysis and an evaluation and synthesis of new and complex ideas. CG6 Ability to communicate with the academic and scientific community and with society in general

about their fields of knowledge in the modes and languages community and with society in general about their fields of knowledge in the modes and languages commonly used in their international scientific community.

CG7 Ability to diagnose potentially complex real problems by integrating and applying knowledge of different subjects

CG8 Acquire the ability to direct the search and learning of any new situation autonomously.

CG9 Ability to work in changing areas and anticipate new situations.

CG10 Acquire the ability to act ethically and socially responsible in the exercise of the profession

Specific competences

CE6 To know in depth the International Auditing Standards and to apply the requirements established in said standards for the elaboration and execution of the global audit plan.

CE7 Ability to apply advanced techniques to assess the risks of material misstatement in the financial statements and respond to those risks

CE9 Ability to apply advanced techniques to determine the value of a company based on its accounting information, systematic risk and atypical projects, as well as to perform a correct and detailed financial planning in different and uncertain scenarios.

CE10 Ability to understand the concept of risk and its different types to be able to manage it, and relate it to the different corporate structures (financial and non-financial).

CE11 Ability to use advanced techniques to manage each of the risks that affect a company.

CE15 Ability to implement measures that guarantee the independence of the auditor through the development of values and ethical commitment.

CE18 Capacidad para comprender la importancia de la estadística en la contabilidad, la auditoria y los mercados financieros para sus diferentes aplicaciones avanzadas en análisis de datos, estimación de intervalos de confianza y/o contraste de hipótesis

Acquire the skills to understand the economic and social effects of changes in accounting regulations, and the process of setting accounting standards, the different actors involved, and their ability to influence regulatory bodies.

DESCRIPTION OF CONTENTS: PROGRAMME

SUBJECT: Seminar series in Data Analytics in Auditing

The seminar series in Data Analytics in Auditing comprise recent topics and advances in auditing and data analysis in auditing. We list a few, here, as examples of topics that can be covered in the seminar series.

- 1. Statistical sampling in auditing
- 2. Principles of data analysis for accounting and auditing
- 3. Big data applications in accounting, auditing, and auditing quality
- 4. Use of accounting databases
- 5. Audit and accounting information systems

LEARNING ACTIVITIES AND METHODOLOGY

Theoretical practical classes

AF4 Laboratory practices

AF5 **Tutorials**

AF6 Team work

Student individual work AF7

AF8 Partial and final exams

Activity code	total hours number	presencial hours number	% Student Presence
AF3	105	105	100%
AF5	70	18	25%
AF6	135	0	0%
AF7	125	0	0%
AF8	15	15	100%
SUBJECT TO	OTAL 450	138	31%

ASSESSMENT SYSTEM

70% final exame

30% attendance, class participation and class work

% end-of-term-examination:	70
% of continuous assessment (assigments, laboratory, practicals):	30