uc3m Universidad Carlos III de Madrid

Legal and Business Aspects of the IoT

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

Department assigned to the subject: Public State Law Department Coordinating teacher: SERNA BILBAO, MARIA NIEVES DE LA

Type: Compulsory ECTS Credits: 3.0

Year: 1 Semester: 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

those required by the title

OBJECTIVES

Basic skills

CB6 Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context

CB7 That students know how to apply the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of ¿¿study

CB8 That students are able to integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and judgments

CB9 That the students know to communicate their conclusions and the knowledge and last reasons that sustain them to specialized and non-specialized public in a clear and unambiguous way

General skills

CG2 Ability to compile and analyze the existing knowledge in the different areas of IOT, autonomously, and ability to make a proposal of possible solutions to the problems posed.

CG7 Ability to know how to communicate (orally and in writing) the conclusions - and the knowledge and ultimate reasons that sustain them - to specialized and non-specialized audiences in a clear and unambiguous way.

Specific competences

CE5 Ability to design, develop, manage and evaluate security assurance mechanisms in the treatment and access to information in computationally limited devices and in IoT networks.

CE6 Ability to apply mathematical, statistical and artificial intelligence methods to model, design and develop applications, services and intelligent systems in the field of IoT.

CE10 Ability to integrate the different systems of perception and control of processes both from the hardware and software point of view.

CE13 Capacity to apply the legislation, regulation and standardization of the IoT.

LEARNING RESULTS

The learning outcomes that students should have are:

- Know and apply the law and legal aspects of IoT.
- Know the models and reference structures of IoT.
- Capacity for analysis, design and control of systems and services
- Know the security risks of an IoT environment.
- Know the physical security measures applicable to mobile devices.
- Know and apply the fundamental techniques of protection of information stored on mobile devices.
- Master the main existing security protocols for mobile communications and their spectrum of application.

DESCRIPTION OF CONTENTS: PROGRAMME

Legal and business aspects program

- 1.- Introduction to IOT
- 2.- Legal regulation of the IOT.
- 3.- Privacy and Data Protection in IOT
- 4.- Security in the IOT.

LEARNING ACTIVITIES AND METHODOLOGY

TRAINING ACTIVITIES OF THE STUDY PLAN REFERRED TO MATTERS

AF1 Theoretical class

AF4 Case studies

AF6 Group work

AF7 Individual student work

AF8 Partial and final exams

EDUCATIONAL TRAINING METHODOLOGIES OF

PLAN REFERRED TO SUBJECTS

MD1 Exhibitions in the teacher's class with support of computer and audiovisual media, in which the main concepts of the subject are developed and the bibliography is provided to complement the students' learning.

MD2 Critical reading of texts recommended by the teacher of the subject: Press articles, reports, manuals and / or academic articles, either for further discussion in class, or to expand and consolidate the knowledge of the subject. MD3 Resolution of practical cases, problems, etc. raised by the teacher individually or in groups.

MD4 Exhibition and discussion in class, under the teacher's moderation of topics related to the content of the subject, as well as case studies

MD5 Preparation of papers and reports individually or in groups.

ASSESSMENT SYSTEM

ASSESSMENT SYSTEMS OF THE STUDY PLAN REFERRED TO THE MATTER

THE ASSESSMENT SYSTEM WILL BE THE ONE THAT ESTABLISHES THE TEACHER OF THE SUBJECTS IN HIS FIRST SESSION THAT MUST BE HANGED IN A GLOBAL CLASSROOM FOR THE KNOWLEDGE OF THE STUDENTS.

IN ITS DEFECT The teacher must evaluate in accordance with what is established in this place: continuous evaluation SE1 Participation in class

SE2 Individual or group work carried out during the course

SE3 Final exam

The mission of the evaluation is to determine the degree of compliance with the programmed objectives. In this sense, the course has been thought to be taught from an essentially face-to-face point of view, since it is considered essential the student's assistance to access and understand the classes given by the different professors who have an important professional and academic experience in The matter.

The teacher may also require in his group a minimum grade in the final exam to perform the overall evaluation, as long as it also indicates the specific form of evaluation.

In the case that the professor does not determine these requirements at the beginning of the semester, the overall evaluation of the subject will be carried out based on the weighting of the grades obtained in the continuous assessment activities, which is equivalent to 50% of the grade. final. The qualification of the final exam is equivalent to the remaining 50%.

Unrealized activities will be graded with a 0. The final grade obtained can be adjusted by the teacher (up to a maximum of one point) based on participation and interventions in class.

Students who do not take the final exam, either in the ordinary or extraordinary session, will appear as not presented

% end-of-term-examination: 50

% of continuous assessment (assignments, laboratory, practicals...): 50

BASIC BIBLIOGRAPHY

- Agustín Madrid Parra María Jesús Blanco Sánchez Derecho mercantil y tecnología , Aranzadi Thomson Reuters ISBN 9788490992142; ISBN 9788490992166 (cub., 2018
- Moises Barrio Andrés internet de las cosas, Reus 2018 ISBN 9788429020380, 2018 ISBN 9788429020380
- Solución para garantizar la privacidad en internet de las cosas Sánchez Alcón, José Antonio ; López Santidrián, Lourdes ; Fernán Martínez, José , ISSN: 1386-6710 El profesional de la información, 2015, Vol.24(1), pp.62-70 , 2015
- Wolfgang Hoffmann-Riem Antonio López Pina Big Data : desafíos también para el Derecho , Civitas Thomson Reuters 2018 ISBN 9788491979142; ISBN 9788491979159 (cub.), 2018

BASIC ELECTRONIC RESOURCES

- AEPD . AEPD: http://https://www.aepd.es/
- AGENCIA CATALANA DE PROTECCION DE DATOS . ACPD: http://https://apdcat.gencat.cat/es/inici/
- AGENCIA VASCA PROTECCION DE DATOS . AVPD: http://www.avpd.euskadi.eus/s04-5213/es/
- ENATIC . La piedra angular del Internet de las cosas: https://www.abogacia.es/2015/02/16/la-piedra-angular-delinternet-de-las-cosas/
- GALAN PASCUAL Y OTROS . ¿La Enciclopedia de los Servicios de Certificación para las administraciones locales¿: http://http://femp.femp.es/files/566-2392-archivo/ID_Digital_VDigital.pdf