



POLITÉCNICA

INTERNATIONAL
CAMPUS OF
EXCELLENCE

COORDINATION PROCESS OF
LEARNING ACTIVITIES
PR/CL/001



E.T.S. de Ingeniería y Sistemas
de Telecomunicación

ANX-PR/CL/001-01

LEARNING GUIDE

SUBJECT

593000425 - Advanced Research Seminars I

DEGREE PROGRAMME

59AG - Eit Digital Track On Internet Technology And Architecture

ACADEMIC YEAR & SEMESTER

2020/21 - Semester 1

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1. Description

1.1. Subject details

Name of the subject	593000425 - Advanced Research Seminars I
No of credits	5 ECTS
Type	Optional
Academic year of the programme	First year
Semester of tuition	Semester 1
Tuition period	September-January
Tuition languages	English
Degree programme	59AG - Eit Digital Track On Internet Technology And Architecture
Centre	59 - Escuela Tecnica Superior de Ingeniería y Sistemas de Telecomunicación
Academic year	2020-21

2. Faculty

2.1. Faculty members with subject teaching role

Name and surname	Office/Room	Email	Tutoring hours *
Cesar Benavente Peces (Subject coordinator)	7007	cesar.benavente@upm.es	M - 12:30 - 13:30 Tu - 12:30 - 13:30 W - 12:30 - 13:30 Th - 12:30 - 13:30 F - 12:30 - 13:30

* The tutoring schedule is indicative and subject to possible changes. Please check tutoring times with the faculty member in charge.

2.2. Research assistants

Name and surname	Email	Faculty member in charge
Tena Ramos, David	david.tena@upm.es	Benavente Peces, Cesar

2.3. External faculty

Name and surname	Email	Institution
Volker Kühn	volker.kuehn@uni-rostock.de	Universität Rostock
Henryk Richter	henryk.richter@uni-rostock.de	Universität Rostock
Steffen Lochmann	Steffen.Lochmann@hs-wismar.de	Hochschule Wismar
Andreas Ahrens	andreas.ahrens@hs-wismar.de	Hochschule Wismar

3. Prior knowledge recommended to take the subject

3.1. Recommended (passed) subjects

The subject - recommended (passed), are not defined.

3.2. Other recommended learning outcomes

- Degree in Electrical and Electronic Engineering, Computer Science Engineering o Information and Communications Technologies Engineering

4. Skills and learning outcomes *

4.1. Skills to be learned

CB10 - To have the learning abilities to continue studying in a mostly self-guided or autonomous manner.

CB6 - To have knowledge that provides the basis or the opportunity of being original to develop and/or to apply ideas, usually in a research context.

CB7 - To be capable of applying the students' acquired knowledge, as well as their problem solving abilities, to new or not well-known environments in broader (or multidisciplinary) contexts that are in the framework of their expertise area.

CB9 - To be capable of communicating the conclusions, together with the knowledge and reasons behind them, to both specialized and non-specialized audiences, in a clear and unambiguous manner.

CE.2 - To be capable of analyzing the Information Society services as well as the technological requirements for its implementation, considering Design for All concepts.

CE.3 - To be capable of identifying the enterprise resource planning systems and the customer relationship management systems.

CE.7 - To be capable of proposing, organizing and executing research works in the framework of the Information Society engineering.

CGEN.3 - To be capable of elaborating, planning strategically, leading, coordinating and managing, both technically and economically, projects in the framework of the Information Society engineering, according to ethical, quality and environmental criteria.

CGEN.5 - To be capable of applying the principles of economy and management of human resources and projects, as well as the legislation, regulation and normalization in the framework of the Information Society engineering.

4.2. Learning outcomes

RA1 - RA9 - Improvement of the public presentation skills of a research work and defense of conclusions

RA2 - RA10 - Improvement of the skills for autonomous learning

* The Learning Guides should reflect the Skills and Learning Outcomes in the same way as indicated in the Degree Verification Memory. For this reason, they have not been translated into English and appear in Spanish.

5. Brief description of the subject and syllabus

5.1. Brief description of the subject

The subject "Advanced Research Seminars II" aims at teach the student the state of the art in certain specific aspects of the specialization of the studies that he is undertaking as well as obtaining transversal competences related to professional practice and scientific activity.

Consequently, the organization of the subject is specific and in accordance with its objectives.

It is organized in a number of specific thematic seminars, aimed at intensifying the training of the student, and more specifically to improve the competences and learning outcomes specific to the Master.

Each seminar has a teaching load of between 1 and 2 ECTS, and are taught by researchers specialized professors and reseachers in disciplines related to the objectives of the Master program.

In addition, most of the participating researchers are professors come from foreign institutions, in order to be able to offer the student the point of view and activity of other centers and research groups, thus enriching the student's education.

The seminars take place in workshops agreed with the investigators based on their availability, so a full closed schedule and planning can't be given.

The teaching schedule is compatible with that of the other subjects.

5.2. Syllabus

1. Seminar 1
2. Seminar 2
3. Seminar 3
4. Seminar 4
5. Seminar 5

6. Schedule

6.1. Subject schedule*

Week	Face-to-face classroom activities	Face-to-face laboratory activities	Distant / On-line	Assessment activities
1	Development of seminar 1 Duration: 10:00			<p>Bibliography and references search and review</p> <p>Continuous assessment and final examination Not Presential Duration: 01:00</p> <p>Individual work</p> <p>Continuous assessment and final examination Not Presential Duration: 15:00</p> <p>Exposition and demonstration of work</p> <p>Continuous assessment and final examination Presential Duration: 01:00</p>
2	Development of seminar 1 Duration: 10:00			<p>Bibliography and references search and review</p> <p>Continuous assessment and final examination Not Presential Duration: 01:00</p> <p>Exposition and demonstration of work</p> <p>Continuous assessment and final examination Presential Duration: 01:00</p> <p>Individual work</p> <p>Continuous assessment and final examination Not Presential Duration: 15:00</p>
	Development of seminar 1 Duration: 10:00			<p>Bibliography and references search and review</p> <p>Continuous assessment and final examination Not Presential Duration: 01:00</p> <p>Exposition and demonstration of work</p>

3				<p>Continuous assessment and final examination Presential Duration: 01:00</p> <p>Individual work</p> <p>Continuous assessment and final examination Not Presential Duration: 15:00</p>
4	<p>Development of seminar 1 Duration: 10:00</p>			<p>Bibliography and references search and review</p> <p>Continuous assessment and final examination Not Presential Duration: 01:00</p> <p>Exposition and demonstration of work</p> <p>Continuous assessment and final examination Presential Duration: 01:00</p> <p>Individual work</p> <p>Continuous assessment and final examination Not Presential Duration: 15:00</p>
5	<p>Development of seminar 1 Duration: 10:00</p>			<p>Exposition and demonstration of work</p> <p>Continuous assessment and final examination Presential Duration: 01:00</p> <p>Bibliography and references search and review</p> <p>Continuous assessment and final examination Not Presential Duration: 01:00</p> <p>Individual work</p> <p>Continuous assessment and final examination Not Presential Duration: 15:00</p>
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Depending on the programme study plan, total values will be calculated according to the ECTS credit unit as 26/27 hours of student face-to-face contact and independent study time.

* The schedule is based on an a priori planning of the subject; it might be modified during the academic year, especially considering the COVID19 evolution.

7. Activities and assessment criteria

7.1. Assessment activities

7.1.1. Continuous assessment

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
1	Bibliography and references search and review		No Presential	01:00	2%	5 / 10	CB6 CB10
1	Individual work		No Presential	15:00	16%	5 / 10	CGEN.3 CB7 CGEN.5 CE.2 CE.7 CE.3
1	Exposition and demonstration of work		Face-to-face	01:00	2%	5 / 10	CB9
2	Bibliography and references search and review		No Presential	01:00	2%	5 / 10	CB6 CB10
2	Exposition and demonstration of work		Face-to-face	01:00	2%	5 / 10	CB9
2	Individual work		No Presential	15:00	16%	5 / 10	CGEN.3 CB7 CGEN.5 CE.2 CE.7 CE.3
3	Bibliography and references search and review		No Presential	01:00	2%	5 / 10	CB6 CB10
3	Exposition and demonstration of work		Face-to-face	01:00	2%	5 / 10	CB9
3	Individual work		No Presential	15:00	16%	5 / 10	CGEN.3 CB7 CGEN.5 CE.2 CE.7 CE.3
4	Bibliography and references search and review		No Presential	01:00	2%	5 / 10	CB6 CB10

4	Exposition and demonstration of work		Face-to-face	01:00	2%	5 / 10	CB9
4	Individual work		No Presential	15:00	16%	5 / 10	CGEN.3 CB7 CGEN.5 CE.2 CE.7 CE.3
5	Bibliography and references search and review		No Presential	01:00	2%	5 / 10	CB6 CB10
5	Exposition and demonstration of work		Face-to-face	01:00	2%	5 / 10	CB9
5	Individual work		No Presential	15:00	16%	5 / 10	CGEN.3 CB7 CGEN.5 CE.2 CE.7 CE.3

7.1.2. Final examination

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
1	Bibliography and references search and review		No Presential	01:00	2%	5 / 10	CB6 CB10
1	Individual work		No Presential	15:00	16%	5 / 10	CGEN.3 CB7 CGEN.5 CE.2 CE.7 CE.3
1	Exposition and demonstration of work		Face-to-face	01:00	2%	5 / 10	CB9
2	Bibliography and references search and review		No Presential	01:00	2%	5 / 10	CB6 CB10
2	Exposition and demonstration of work		Face-to-face	01:00	2%	5 / 10	CB9
2	Individual work		No Presential	15:00	16%	5 / 10	CGEN.3 CB7 CGEN.5 CE.2 CE.7 CE.3
3	Bibliography and references search and review		No Presential	01:00	2%	5 / 10	CB6 CB10
3	Exposition and demonstration of work		Face-to-face	01:00	2%	5 / 10	CB9

3	Individual work		No Presential	15:00	16%	5 / 10	CGEN.3 CB7 CGEN.5 CE.2 CE.7 CE.3
4	Bibliography and references search and review		No Presential	01:00	2%	5 / 10	CB6 CB10
4	Exposition and demonstration of work		Face-to-face	01:00	2%	5 / 10	CB9
4	Individual work		No Presential	15:00	16%	5 / 10	CGEN.3 CB7 CGEN.5 CE.2 CE.7 CE.3
5	Bibliography and references search and review		No Presential	01:00	2%	5 / 10	CB6 CB10
5	Exposition and demonstration of work		Face-to-face	01:00	2%	5 / 10	CB9
5	Individual work		No Presential	15:00	16%	5 / 10	CGEN.3 CB7 CGEN.5 CE.2 CE.7 CE.3

7.1.3. Referred (re-sit) examination

No se ha definido la evaluación extraordinaria.

7.2. Assessment criteria

General rules.

1. **Extension of the task. The task (theoretical description).** In any case, must have a minimum of 20 A4 pages written with Arial 10 points and double spaced, and an additional cover page with the title of the work and personal data of the student, and additional pages with used references.
2. **Practical developments: complementing the theoretical work with practical demonstrations will have a greater value, due to the student's interest in learning and the difficulty they may entail.**
3. **The task is individual in character and must be related to the subjects related to the seminars.**
4. **Evaluable aspects. The task must be original and if possible with a high practicality.**
5. **References should be appropriate in relation to the task area. Relevant international journals, transactions and electronic publications must be used, which can be accessed through the UPM's resources.**
6. **The evaluable aspects are those that are described in the following table with the corresponding weight.**

Assessed aspects	%
Originality	30
Referencies	10
Accuracy	10
Clarity	10
Practical demonstrations	40

8. Teaching resources

8.1. Teaching resources for the subject

Name	Type	Notes
Classroom	Equipment	
White/black board	Equipment	
Overhead projector	Equipment	
Slides	Bibliography	
b-learning platform	Web resource	
Library	Bibliography	
Access to electronic bibliographic resources	Bibliography	

9. Other information

9.1. Other information about the subject

The seminars are developed in **English**.

Both in the Moodle platform and the faculty website the information and schedule of the new activities will be periodically updated.

The number of seats will be limited to guarantee the attendees' health according to current regulation due to COVID-19.