# Mondragon Unibertsitatea Goi Eskola

Escuela Politécnica

# Goi Eskola Politeknikoa | Mondragon Unibertsitatea

Course: 2023 / 2024 - Course planning

[GIH304] SOFTWARE ENGINEERING

**GENERAL INFORMATION** 

Studies DEGREE IN COMPUTER ENGINEERING
Subject ?

Semester 1 Course 3 Mention / Field of

Character COMPULSORY

Plan 2022 Modality Face-to-face

Credits 4,5 Hours/week 4.1

Language CASTELLANO/EUSKARA

specialisation

Total hours 73.8 class hours + 38.7 non-class hours = 112.5

total hours

**PROFESSORS** 

ALDALUR CEBERIO, IÑIGO

### **REQUIRED PREVIOUS KNOWLEDGE**

Subjects Knowledge

(No specific previous subjects required) (No pre

(No previous knowledge required)

LEARNING RESULTS				
LEARNING RESULTS	KC	SK	AB	ECTS
GIR304 - To apply the principles, methodologies and life cycles of software engineering to analyze,	-	х		3,78
design, build and maintain applications in a robust, secure and efficient way				
G-RTR1 - To develop interdisciplinary projects specific to their specialty and of gradual complexity, -		x		0,4
becoming aware of respect for human rights and fundamental rights, and analyzing and assessing the				
impact of the proposed solutions on the SDGs - to acquire and/or apply basic, advanced and /or				
avant-garde, demonstrating the ability to work in multidisciplinary teams and/or undertake further studies				
with a high degree of autonomy				
G-RTR2 - To express information, ideas and the arguments that support them in an orderly, clear and		x		0,32
coherent manner, orally and in writing, based on quality information, self-made or obtained from different				
sources, using inclusive and non-discriminatory language				

Total: 4,5

KC: Knowledge or Content / SK: Skills / AB: Abilities

#### **CONTENTS**

1. Introduction to software engineering2. Best practices 2.1 Coding style 2.2 Documentation3. Verification and Validation 3.1 V&V Introduction 3.2 Static Analysis 3.2.1 Static Analysis Tools (SonarQube, SonarLint, etc.) 3.3 Dynamic Analysis 3.3.1 Unit Testing Tools (JUnit) 3.3.2 User Testing Tools (Katalon)4. Configuration Management and Maintenance 4.1 Version control tools

## LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources Bibliography

Subject notes
Technical articles

Moodle Platform

Specific Master Software