Enhanced planning and management of enterprises:

Calendar: 2nd Year 1st Semester

Contact Hours: 15h00T +30h00 T/P+ 7h30 EL/OT

Syllabus*:*
INTRODUCTION Analysis of Civil Engineering and Construction setor and future trends of development.
ORGANIZATIONS the organization, its structure and maturity levels, environmental factors and process assets. Planning types, origin and organization of portfolios, programs and projects.
PROCESSES Integration management: Initiation, goals and requirements. Project selection and prioritization. Scope management: WBS, OBS and responsibilities matrix. Time management: Activities, sequence, resources, durations, scheduling. PERT Method. Cost management: cost estimating and budget. EVM. Communication management and stakeholders. Risk management: risk identification and Definition. RBS. Qualitative analysis and quantitative analysis, response and control. Software analysis and risk management. Procurement management.
PROJECT MANAGER'S COMPETENCES Concept of competence. Technical, behavioral and contextual Skills and its assessment.

Intended learning outcomes of the curricular unit:
Identify the way in which organizations are structured, their maturity in project management, their key assets and how projects arise, how are selected and organized, in the global context in which organizations develop their activity.
Identify stakeholders, assess their impact and planning the communication with them.
Assess needs, define goals, identify constraints, planning the implementation of multidisciplinary construction projects, defining its scope, work packages and activities, team creation and assignment of responsibilities for its implementation.
To plan, analyze, evaluate, monitor performance and integrate scope, time, cost and risk of the construction project, through the use of methodologies and tools.
Analyze non-traditional procurement and tender models in the civil construction setor. Identify and evaluate Manager core competencies and their development construction projects and development throughout his professional career.

Demonstration of the syllabus coherence with the curricular unit's intended learning outcomes:
The syllabus allows the student to:
Develop the cognitive, behavioral and contextual processes associated with working in multidisciplinary engineering and construction organizations and teams, understand, manage and organize the project goals, in their relationship with society, with stakeholders, organize and manage the members of your project team.
Know, systematize and train the most advanced methods, techniques and tools, in terms of integration management, scope management, time management, cost management, risk management, communication management, procurement management and with a view to understanding, applying, analyzing, evaluating, monitoring and creation of elements relating to the planning and management of construction projects.
Understand the analyze prospects of future engineering industry and civil construction and development of competencies-interpersonal and for their future professional career.

Teaching methodologies (including evaluation):
Theoretical-practical lessons and eLearning activities. Evaluation 95% by exam or two tests and 5% by E-Learning activities.

Demonstration of the teaching methodologies coherence with the curricular unit's intended learning outcomes:
Theoretical-practical lessons:
Exposition and interactive with audiovisuals resources and/or the other and which seeks to stimulate critical thinking, the reflection and the self-knowledge of students, communication skills, and the experimental discovery of the construction project manager competences.
Application of methodologies, tools and techniques in the context, for the analysis and performance monitoring in terms of scope, duration, cost and risk.
Computer laboratory lessons in advanced Microsoft Project usage and risk management software for the experimental discovery of new information and communication technologies;
E-Learning activities:
Practical work of research, test and presentation of methodologies and tools.
Asynchronous activities, with a view to stimulate the research, analysis, evaluation and comment of themes and concepts in the context of the theme.
Synchronous activities in order to monitor the development and study of the respective subjects.