

Diploma of Postgraduate Studies in Railway Infrastructure Rehabilitation

Starting date 6 of March 2020

Study plan:

The number of credits necessary to obtain Diploma of Postgraduate Studies in Railway Infrastructure Rehabilitation is 15 ECTS. This number is granted by the approval in each of the obligatory and some of the optional curricular units specified in the table below.

CURRICULAR UNITS	OCUPATION	TYPE	WORK HOURS		CREDITS
			TOTAL	IN CONTACT	ECTS
Course introduction	1 st week	OBR	28	TP:12	1
Railway track inspection (IVF)	Semestral	OBR	84	TP:26	3
Dynamic and long-term behaviour of the railway track (CVF)	Semestral	OBR	56	TP:18	2
Numerical models for dynamic response of the railway track (MCD)	Semestral	OBR	84	TP:26	3
Signal acquisition and processing (APS)	Semestral	OPT	56	TP:18	2
BIM methodology and technical databases (BIM-ProNIC)	Module 1	OPT	42	TP:14	1,5
Numerical simulation of railway accidents for passive safety analysis (SSP)	Module 1	OPT	42	TP:12	1,5
Technics of rehabilitation of the railway track (RVF)	Module 2	OBR	42	TP:14	1,5
Geosynthetics in rehabilitation of the railway track (GRF)	Module 2	OBR	38	TP:12	1,5
Methods for decision-making process (MAD)	Module 2	OPT	42	TP:14	1,5
Seminars, laboratory tests and visits (SEV)	Semestral	OBR	42	S:14	1,5

Notes:

The study will last for 15 weeks and will start in the first week with the involvement of all lecturers in an introduction to the topics to be covered (Course introduction), by framing the theme, defining the course objectives, and "levelling" the candidates by giving some additional training to trainees with a lack of knowledge in a certain area needed to initiate the study. The remaining 14 weeks will be divided into 2 modules of equal duration of 7 weeks. Training will be given in 10 subjects designed to address the key topics associated with the rehabilitation of railway infrastructure.

TP: theoretic-practical; S: seminars; OBR: obligatory; OPT: optional