

Task name		Start date	End date	Duration (months)	2016				2017										2018												2019													
					01 Sep	01 Oct			01 Jan			01 Apr		01 Jul			01 Oct		01 Jan			01 Apr		01 Jul			01 Oct			01 Jan			01 Apr		01 Jul			01 Oct						
					Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
▼ Doctoral Program in Informatics Engineering																																												
▼ Human-robot cooperative assembly with semantic learning by demonstration		01/10/16	01/10/19	36	Human-robot cooperative assembly with semantic learning by demonstration																																							
1	Use cases definition	01/10/16	01/11/16	1			Use cases definition																																					
2	Review of state of the art	01/11/16	01/12/16	1			Review of state of the art																																					
3	Evaluation and selection of	01/12/16	01/02/17	2			Setup of testing platforms																																					
4	Creation of perception and learning datasets	01/02/17	01/04/17	2			Creation of perception and learning datasets																																					
5	Definition of software architecture	01/04/17	01/07/17	3			Definition of software architecture																																					
6	Knowledge / skill representation	01/07/17	01/10/17	3			Knowledge / skill representation																																					
7	Extraction of assembly knowledge from Standard Operating Procedures	01/10/17	01/01/18	3			Extraction of assembly knowledge from Standard Operating Procedures																																					
8	Assembly operations from structured knowledge / assembly skills	01/01/18	01/04/18	3			Assembly operations from structured knowledge / assembly skills																																					
9	Learning of new assembly operations from human demonstration	01/04/18	01/09/18	5			Learning of new assembly operations from human demonstration																																					
10	Immersive human-robot cooperation using projection mapping	01/09/18	01/11/18	2			Immersive human-robot cooperation using projection mapping																																					
11	Validation of assembly system in industrial conditions	01/11/18	01/03/19	4			Validation of assembly system in industrial conditions																																					
12	Writing of articles and thesis	01/03/19	01/10/19	7			Writing of articles and thesis																																					
																							Milestone - Assembly operations from skills										Milestone - Cooperative assembly											