

EICF Investment Casting Manufacturing Industry 4.0 control Course

PDCA	Day	Time	General topic	Particular topic	Lecturer
	Sunday 09/06/2024	19.00-20:00	Reception	Welcome to participants and presentation of the event	C. Olabe(EICF)/F.Santos(AZTERLAN)
PLAN	Monday 10/06/2024	8:00-9:30	Visit to AZTERLAN		F.Santos(AZTERLAN)
		9:30-11:00	Process and product design control	Digital audit(action plan)	F.Santos(AZTERLAN)
		11:00-11:15		Coffee break	
		11:15-13:00		Design tools(KPIs, concurrent engineering component and tooling, design rules, Niyama)	J.M.Gutierrez(AZTERLAN)/ ESI-GROUP
		13:00-14:00		APQP(flow chart, control plan, FMEA)	F.Santos(AZTERLAN)
	Monday 10/06/2024	14:00-15:00		Lunch	
	Monday 10/06/2024	15:00-17:00		Exercises digital audit, tooling design, APQP	F.Santos(AZTERLAN)
DO	Tuesday 11/06/2024	8:00-9:00	Process control	Data capture	F.Santos(AZTERLAN)/ CONSARC
		9:00-11:00		Quality (X-R, working instruction, technical data sheet, purchase specifications)	F.Santos(AZTERLAN)
		11:00-11:15		Coffee break	
		11:15-12:30		Productivity (OEE, SMED, Lean manufacturing, 6 σ)	G.Artola(AZTERLAN)
		12:30-14:00		Services (FIFO, production capacity studies, advance planning studies)	G.Artola(AZTERLAN) /CMG
	Tuesday 11/06/2024	14:00-15:00		Lunch	
	Tuesday 11/06/2024	15:00-17:00		Exercises different tools	F.Santos(AZTERLAN) /MPI
DO	Wednesday 12/06/2024	8:00-9:00	Process control	Data capture and preprocessing	J.Nieves(AZTERLAN)
		9:00-10:00		Data storage and link	J.Nieves(AZTERLAN)
		10:00-11:00		Digital twins	J.Nieves(AZTERLAN)
		11:00-11:15		Coffee break	
		11:15-12:30		Model Predictive Controls (MPC)	J.Nieves(AZTERLAN)
	12:30-14:00		Orchestrator platform, modules integration	J.Nieves(AZTERLAN)	
	Wednesday 12/06/2024	14:00-15:00		Lunch	
	Wednesday 12/06/2024	15:00-17:00		Exercises data capture, procesing and analysis	J.Nieves(AZTERLAN)
CHECK	Thursday 13/06/2024	8:00-10:00	Product control	Destructive testing(microestructure, chemical analysis and mechanical tests)	F.Santos(AZT)
		10:00-11:00		Capacity measurements/MSA	F.Santos(AZTERLAN)
		11:00-11:15		Coffee break	
		11:15-12:30		Special controls (heat treatment). TREAT methodology	F.Santos(AZTERLAN)
		12:30-14:00		Special controls (penetrant testing, X-Ray)	F.Santos(AZTERLAN)/ X RIS
	Thursday 13/06/2024	14:00-15:00		Lunch	
	Thursday 13/06/2024	15:00-17:00		Exercises different tools	F.Santos(AZTERLAN)
ADJUST	Friday 14/06/2024	8:00-9:00	Management	KPI definition and follow up	F.Santos(AZTERLAN)
		9:00-11:00		Continuous improvement tools (Pareto, Ishikawa, ...)	F.Santos(AZTERLAN)
		11:00-11:15		Coffee break	
		11:15-12:30		Advance planification tools	J.Nieves(AZTERLAN)
		12:30-14:00		Digital access to information, new trends in digitalization	J.Nieves(AZTERLAN)
	Friday 14/06/2024	14:00-15:00		Lunch	
	Friday 14/06/2024	15:00-17:00		Final exam	F.Santos(AZTERLAN)
		20:00-23:00		Final dinner	