

Introduction To Robot Programming

RPB1-KWST-V302 Course Syllabus

DAY #	SESSION	TIME	ACTIVITY	TOPIC	EST. TIME	
Day 1	Session 1	1h:50m	Introduction	Course and learning outcomes overview.	10 min	
			Chapter 1	F60 Controller Startup and Shutdown	15 min	
			Chapter 2	F60 Teach Pendant	15 min	
			Chapter 3	Teach Pendant Screen	20 min	
			Chapter 4	Jogging Basics and Coordinate Systems	50 min	
		Break	10 min			
		Session 2	2 hours	Quiz 1	Chapters 1-4	20 min
				Chapter 5	Alarms and Errors	20 min
				Chapter 6	Creating a Program	30 min
				Chapter 7	Path Creation	50 min
	Lunch Break	50 min				
Day 2	Session 3	1h:50m	Quiz 2	Chapters 5-7	15 min	
			Drawing Lab 1	Joint and Linear Moves	45 min	
			Drawing Lab 2	Circular Moves	50 min	
		Break	10 min			
		Session 4	2 hours	Drawing Lab 3	Drawing Shapes	2 hours
	Session 1	1h:50m	Chapter 8	Path Confirmation and Playback	30 min	
			Chapter 9	Copy, Delete, and Rename a Program	20 min	
			Chapter 10	Program Editing	1 hour	
		Break	10 min			
		Session 2	2 hours	Quiz 3	Chapters 8-10	10 min
			Chapter 11	AS Language	40 min	
			Chapter 12	Position Variables	30 min	
			Palletizing Lab	Stacking	40 min	
	Lunch Break	50 min				

	Session 3	1h:50m	Quiz 4	Chapters 11-12	10 min
			Chapter 13	Inputs and Outputs	30 min
			I/O Pendant Lab 1	I/O Basics	40 min
			Chapter 14	Condition Statements	40 min
	Break	10 min			
	Session 4	2 hours	Start Chapter 16	Call/Return functions	15 min
			Chapter 15	Control Instructions	30 min
			I/O Pendant Lab 2	I/O Jump Instruction	30 min
			I/O Pendant Lab 3	Advanced I/O	45 min
Day 3	Session 1	1h:50m	Quiz 5	Chapters 13-15	20 min
			Chapter 16	Frame	30 min
			Frame Lab 1	Creating a Frame	1 hour
	Break	10 min			
	Session 2	2 hours	Frame Lab 2	Creating Pos Variables in Frame	1 hour
			Frame Lab 3	Moving in Frame	1 hour
	Lunch Break	50 min			
	Session 3	1h:50m	Quiz 6	Chapter 16	20 min
			Frame Lab 4	Transformative Variables	40 min
			Frame Lab 5	Editing Position Variables and Frame	50 min
	Break	10 min			
	Session 4	2 hours	Frame Lab 4	Using Several Frames	15 min
Day 4	Session 1	1h:50m	Start Palletizing Lab	Basic Palletizing	1h:50m
	Break	10 min			
	Session 2	2 hours	Finish Palletizing Lab		2 hours
	Lunch Break	50 min			
	Session 3	1h:50m	Conveyor Lab	Palletizing with the incorporation of a conveyor	1h:50m
	Break	10 min			
	Session 4	2 hours	Final Exam	Chapters 1-16	2 hours
				Total Contact Time	32 hours