

Nigeria - vocational training - electrotechnical engineering time schedule

Time period for realisation				
Month 7	week 1 5x6 = 30 h	week 2 5x6 = 30 h	week 3 5x6 = 30 h	week 4 5x6 = 30 h
Task:	DC circuit	AC circuit	Electrical machines	Electronic components
Electrotechnics with measurements	The basic laws of electrical engineering	Basics of AC circuits	Basic electric current transformations	
	Electrical resistors wiring	Simple AC circuits	Transformer	
	Measurements in a DC circuit	Compound AC circuits	DC motor	
	Electric field	Measurements in an AC circuit	AC motor	
	Magnetic field	AC circuit load	Electrical generators	
		Three-phase voltage system		
Implementor:	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC
Task:				
Implementing body (name):	Matjaž	Matjaž	Matjaž	Zvone
Month 8	week 1 5x6 = 30 h	week 2 5x6 = 30 h	week 3 5x6 = 30 h	week 4 5x6 = 30 h
Task:	Electrical components and wirings	Systems and protection	Lighting design	Modern installations
Installation - electrical	Theory - Components of electrical installations	Measurements on electrical installations	Design of conductors and protection	Theory - Modern KNX installations
	Practice - Wiring of installational joints, extensions, subdividers, deviders, lighting sources, FC bulbs,	Theory - Conductor systems under voltage	Calculation - Design of conductors and protection	Practice - Making KNX installation samples
	plug-in connection devices, electronic pre-switch devices	Theory - Protection elements	Calculation - Lightning design	
		Theory, practice - Measurements on electrical installations		
Performant:	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC
Task (clasroom 2):				
Implementing body (name):	Branko	Branko	Branko	Branko
Month 9	week 1 5x6 = 30 h	week 2 5x6 = 30 h	week 3 5x6 = 30 h	week 4 5x6 = 30 h
Task:	Basics of Engineering	Machine Components	Technical documentation (basics)	Basics of CAD CAM
Basics of Engineering	Properties of Materials	Brackets, shafts	Types of drawings	2D drawings
	Devison of Materials	Clutches	Standardisation	3D design
	Bonding of Materials	Reductors, power transfer	Types of views	Tools for drawing electro diagrams
	Connections	Connectors	Dimensioning	Designing installations with modern tools
			Exercises	
Implementor:	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC

Task (classroom 2):				
Implementing body (name):	Podvinšek, Pogoreličnik	Podvinšek	Korošec	Osojnik, Hrovat
Month 10	<i>week 1 5x6 = 30 h</i>	<i>week 2 5x6 = 30 h</i>	<i>week 3 5x6 = 30 h</i>	<i>week 4 5x6 = 30 h</i>
Naloga:	Basics of logics	PLC use	Manipulators	Detection of system errors
Maintenance of automated machine lineups	Basics of logical circuits	Programming procedure	Pneumatic and hydraulic components	Operation monitoring
	Logical equations	I/O units of PLC and connecting	Electropneumatics	Tracing of program implementation in PLC
	Sequential circuits	Examples of programming	Linear guides	Analysis of Errors - diagnostics
	Microprocessors	The use of PLC on FESTO systems	Sensors	Troubleshooting
			Primeri uporabe - FESTO sistemi MPS	
Implementor:	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC
Task (classroom 2):				
Implementing body (name):	Zvone	Zvone	Zvone, Seitel	Zvone, Seitel
Month 11	<i>week 1 5x6 = 30 h</i>	<i>week 2 5x6 = 30 h</i>	<i>week 3 5x6 = 30 h</i>	<i>week 4 5x6 = 30 h</i>
Task:	Regulators	Servo systems	CNC machines	Robotics
Automatisation of mechatronic systems	PID loops	Use of frequency converters	CNC machine structure	Types of Robots
	Output levels of regulators	Use and settings of AC servo drives	CNC machines maintenance	Drives and dynamics
	Frequency converters	Regulation of speed	Basics of programming	Basics of programming
		Regulation of position - linear axis		Maintenance of Robots
Implementor:	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC
Task (classroom 2):				
Implementing body (name):	Zvone	Zvone	Hrovat	Hrovat
Month 12	<i>week 1 5x6 = 30 h</i>	<i>week 2 5x6 = 30 h</i>	<i>week 3 5x6 = 30 h</i>	<i>week 4 5x6 = 30 h</i>
Task:	Energy Systems	Solar thermics	Photovoltaics	House installations
Renewable Energy Sources	Pumps	Basics of solar engineering	Basics of photovoltaics	Plumbing
	Ventilators	Components of thermosolar system	Photovoltaic system components	Heating/cooling
	Compressors	Calculation of thermosolar system	Photovoltaic system calculations	Ventilation
		Exercises	Exercises	
Implementor:	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC
Task (classroom 2):				
Implementing body (name):	Repnik, Osojnik		Grabant	Repnik

TOTAL

720 hours

120 days

