

Nigeria - vocational training - automobile maintenance and diagnostics time schedule

Time period for realisation				
Month 1	week 1 5x6 = 30 h	week 2 5x6 = 30 h	week 3 5x6 = 30 h	week 4 5x6 = 30 h
Task:	Getting to know the basic automobile systems	Internal combustion engines	Petrol (gasoline) engines	Diesel engines
	Basic theory of automobile systems	Basic theory of motors with internal combustion	Basic theory of gasoline engines	Basic theory of diesel engines
	The demonstration of basic automobile systems	The practical use of motors with internal combustion	The theoretical and practical demonstration of a working 4-stroke gasoline engine	The theoretical and practical demonstration of a working 4-stroke diesel engine
	The purpose and task of basic automobile systems	The division of motors with internal combustion	The theoretical and practical demonstration of a working 2-stroke gasoline engine	The speciality of a 4-stroke diesel engine
			The advantages and disadvantages of 4-stroke and 2-stroke gasoline engines	The advantages and disadvantages of 4-stroke diesel engine
Implementor:	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC
Task:				
Implementing body (name):	Boris	Boris	Boris	
Month 2	week 1 5x6 = 30 h	week 2 5x6 = 30 h	week 3 5x6 = 30 h	week 4 5x6 = 30 h
Task:	Alternative ways of power/propulsion	Vehicle brakes		ABS brakes
	The meaning of alternative propulsion	The functioning of disc and drum brakes	The functioning of disc and drum brakes	The purpose and operation of ABS brake system (anti-lock breaking system)
	Different alternative propulsions	The testing of brakes on a test track	The testing of brakes on a test track	The testing and failure detection of the working of ABS brakes with the help of KTS tester
	The demonstrations of some of the alternative propulsions	The maintenance work and the repair of brake systems on a personal vehicle	The maintenance work and the repair of brake systems on a personal vehicle	The repair and failure troubleshooting on ABS brake systems
	The specifics with the usage of alternative propulsion	The testing of brake system on a a testing device	The testing of brake system on a a testing device	ABS device control and validation test with KTS tester
	The advantages and disadvantages of certain alternative propulsions			
Implementor:	ŠCV- MIC	ŠCV- MIC		ŠCV- MIC
Task (classroom 2):				
Implementing body (name):	Boris	Marjan		
Month 3	week 1 5x6 = 30 h	week 2 5x6 = 30 h	week 3 5x6 = 30 h	week 4 5x6 = 30 h
Task:	Air-conditioning devices		Powershifting - Clutches	

	The operation of air-conditioning devices	The operation of AC compressors	Methods of power transferral from differential to driven wheels - front, back or 4x4 wheel drive, and electronic regulation of power transferral to driven wheels	
	Integral systems of AC devices	AC devices leak check	Repair and maintenance of power transmission mechanisms	
	The failure diagnostics with the help of a tester	Leakage test with the help of UV dye	Control and diagnostics of working of power transmission mechanisms	
	Car AC gases and re-gasing processes			
	The failure troubleshooting and the replacement of certain systems			
Implementor:	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC
Task (classroom 2):				
Implementing body (name):	Boštjan	Boštjan	Marjan	Marjan
Month 4	<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:	Control mechanisms - undercarriage		Maintenance of transferral systems (automatic transmission, manual transmission)	
	Basics of control mechanisms and their components		Basics of transmission mechanisms and their components	
	Control and repair of control mechanisms		Control and repair of transmission mechanisms	
	Mehanske in optične osne meritve		Computer measurements of transmission mechanisms	
	Computer axis measurements		Calibration and diagnostics with the help of a tester	
	Calibration and diagnostics with the help of a tester			
Implementor:	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC
Task (classroom 2):				
Implementing body (name):	Ivan	Ivan	Ivan	Ivan
Month 5	<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:	Electrical components		Diagnostics (work with the diagnostical testers)	
	Electricity in cars	Reading of error memory with the help of a tester	Types of electronic testers	Testing of specific components
	Fuses and wires	Testing of specific components with the help of a tester	Diagnostic interface	Coding of motor computers
	Components and their functions	Testing of specific components with the help of an oscilloscope	Car connectors - standards	
	Electronic accelator pedal		Codes of error memory	
	Electronic throttle control		Testing of various types of vehicles	
Implementor:	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC
Task (classroom 2):				
Implementing body (name):	Boštjan			
Month 6	<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:	Service programs (ESI-tronic, Avtodata,..)		Measurements	Tests
	Familizariation with service help programs		Measurements with testers	Practical exam
	Work with the "Bosch Esi tronic" program		Measurements with oscilloscope	

	Work with the "Avtodata" program		Measurements with voltmeters	
	Use of service help programs for diagnostics		Measurements with ammeters	
<i>Implementor:</i>	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC	ŠCV- MIC
<i>Task (classroom 2):</i>				
<i>Implementing body (name):</i>	Boštjan		Boštjan	

Total 720 hours

120 days