

Appendix: Module and Car Mechanics Competence Matrix

Module Title:			
Competence areas	Steps of competence		
	Beginner	Intermediate	Advanced (EQF level 4)
Maintenance, inspection & service			
Diagnosis & fault finding			
Repair			
Retrofit			
Common Content Areas			
Engine			
Brakes			
Steering and Suspension			
Transmission			
Safety and comfort			
Electrical supply			
Electrical systems			
Special electrical cars/systems			
Car body and paint			
Customer service			
Health and safety			

Car Mechanics Competence Matrix		
Maintenance, inspection & service		
Steps of competence		
Beginner	Intermediate	Advanced (EQF level 4)
The student will be able to ...		
... carry out maintenance following producer related standards and customer needs under guidance	... Carry out maintenance and inspection independently, identify necessary additional works and implement these in regular work process.	... plan solve and carry out service even in unknown situations. ... prepare cars for security checks and respect statutory provisions.
Diagnosis & fault finding		
Beginner	Intermediate	Advanced (EQF level 4)
The student will be able to ...		
... identify simple errors in electrical, mechanical hydraulic and pneumatic systems under guidance.	... diagnose and eliminate errors in complex control and regulation systems independently.	... plan, solve and carry out comprehensive and complex diagnoses and fault finding procedures on networked systems ... analyze data communication between control systems. ... use expert test systems for error finding.

Car Mechanics Competence Matrix (2)		
Repair		
Steps of competence		
Beginner	Intermediate	Advanced (EQF level 4)
The student will be able to ...		
<p>... check disassemble, change and assemble simple devices and systems following standard plans.</p>	<p>... evaluate the condition of wear parts, make work plans and replace/repair parts, devices and systems in a routine or known situation.</p> <p>... realize and carry out necessary measurements and adjustment tasks.</p> <p>... diagnose and eliminate faults in electrical supply systems.</p> <p>... realize complications with memory and starting systems</p>	<p>... to provide estimation of repair efforts and reflect car value aspects.</p> <p>... repair and/or replace parts in complex systems.</p> <p>... repair and/or replace engine and transmission components using detailed professional knowledge.</p>
Retrofit		
Beginner	Intermediate	Advanced (EQF level 4)
The student will be able to ...		
<p>... modify and retrofit simple car parts following manufactures instructions.</p>	<p>... retrofit car parts and realize and carry out necessary adjustments within routine or known situations.</p>	<p>... analyze and identify customer wishes, plan and carry out retrofitting and adjusting tasks following producer instructions and statutory norms.</p> <p>... analyze and evaluate consequences of modifications and retrofits.</p>