Mata Kuliah : Maintenance Practice
Bobot : 2 SKS (1 Teori dan 1 Praktek)
Standar Kompetensi : Peserta diklat mampu memahami dan menjelaskan fungsi cara Maintenance Practice

No.	Kompetensi Dasar	Pokok Bahasan	Sub Pokok Bahasan	Sumber Belajar
Teori				
1.	Mampu memahami dan menjelaskan Safety Precautions	Safety Precautions	Aircraft and Workshop Aspects of safe working practices including precautions to take when working with electricity, gases especially oxygen, oils and chemicals. Also, instruction in the remedial action to be taken in the event of a fire or another accident with one or more of these hazards including knowledge on extinguishing agents.	
2.	Mampu memahami dan menjelaskan Workshop Practices	Workshop Practices	Care of tools, control of tools, use of workshop materials; Dimensions, allowances and tolerances, standards of workmanship; Calibration of tools and equipment, calibration standards	

No.	Kompetensi Dasar	Pokok Bahasan	Sub Pokok Bahasan	Sumber Belajar
3.	Mampu memahami dan menjelaskan Tools	Tools	Common hand tool types; Common power tool types; Operation and use of precision measuring tools; Lubrication equipment and methods. Operation, function and use of electrical general test equipment;	
4.	Mampu memahami dan menjelaskan Avionic General Test Equipment	Avionic General Test Equipment	Operation, function and use of avionic general test equipment.	
5.	Mampu memahami dan menjelaskan Engineering Drawings, Diagrams and Standards	Engineering Drawings, Diagrams and Standards	Drawing types and diagrams, their symbols, dimensions, tolerances and projections; Identifying title block information; Microfilm, microfiche and computerised presentations; Specification 100 of the Air Transport Association (ATA) of America; Aeronautical and other applicable standards including ISO, AN, MS, NAS and MIL; Wiring diagrams and schematic diagrams.	

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6.	Mampu memahami dan menjelaskan Fits and Clearances	Fits and Clearances	Drill sizes for bolt holes, classes of fits; Common system of fits and clearances; Schedule of fits and clearances for aircraft and engines; Limits for bow, twist and wear; Standard methods for checking shafts, bearings and other parts.	
7.	Mampu memahami dan menjelaskan Electrical Cables and Connectors	Electrical Cables and Connectors	Continuity, insulation and bonding techniques and testing; Use of crimp tools: hand and hydraulic operated; Testing of crimp joints; Connector pin removal and insertion; Co-axial cables: testing and installation precautions; Wiring protection techniques: Cable looming and loom support, cable clamps, protective sleeving techniques including heat shrink wrapping, shielding.	
8.	Mampu memahami dan menjelaskan Riveting	Riveting	Riveted joints, rivet spacing and pitch; Tools used for riveting and dimpling; Inspection of riveted joints.	

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9.	Mampu memahami dan menjelaskan Pipes and Hoses	Pipes and Hoses	Bending and belling/flaring aircraft pipes; Inspection and testing of aircraft pipes and hoses; Installation and clamping of pipes.	
10.	Mampu memahami dan menjelaskan Springs	Springs	Inspection and testing of springs.	
11.	Mampu memahami dan menjelaskan Bearings	Bearings	Lubrication requirements of bearings; Defects in bearings and their causes.	
12.	Mampu memahami dan menjelaskan Transmissions	Transmissions	Inspection of gears, backlash; Inspection of belts and pulleys, chains and sprockets; Inspection of screw jacks, lever devices, push-pull rod systems.	
13.	Mampu memahami dan menjelaskan Control Cables	Control Cables	Swaging of end fittings; Inspection and testing of control cables; Bowden cables; aircraft flexible control systems.	

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14.	Mampu memahami dan menjelaskan Material handling	Material handling	Sheet Metal Sheet metal working, including bending and forming; Inspection of sheet metal work. Composite and non-metallic Bonding practices; Environmental conditions Inspection methods	
15.	Mampu memahami dan menjelaskan Welding, Brazing, Soldering and Bonding	Welding, Brazing, Soldering and Bonding	(a) Soldering methods; inspection of soldered joints; (b) Welding and brazing methods; Inspection of welded and brazed joints; Bonding methods and inspection of bonded joints.	
16.	Mampu memahami dan menjelaskan Aircraft Weight and Balance	Aircraft Weight and Balance	(a) Centre of Gravity/Balance limits calculation: use of relevant documents; (b) Preparation of aircraft for weighing; Aircraft weighing;	
17.	Mampu memahami dan menjelaskan Aircraft Handling and Storage	Aircraft Handling and Storage	Aircraft taxiing towing and associated safety precautions;	

No.	Kompetensi Dasar	Pokok Bahasan	Sub Pokok Bahasan	Sumber Belajar
			Aircraft jacking, cbocking, securing and associated safety precautions; Aircraft storage methods; Refuelling/defuelling procedures; De-icing/anti-icing procedures; Electrical, hydraulic and pneumatic ground supplies. Effects of environmental conditions on aircraft handling and operation.	
18.	Mampu memahami dan menjelaskan Disassembly, Inspection, Repair and Assembly Techniques	Disassembly, Inspection, Repair and Assembly Techniques	a. Types of defects and visual inspection techniques. b. Corrosion removal, assessment and reprotection. c. General repair methods, Structural Repair Manual; d. Ageing, fatigue and corrosion control programmes; e. Non destructive inspection techniques including, penetrant, radiographic, eddy current, ultrasonic and boroscope methods. f. Disassembly and re-assembly techniques. g. Trouble shooting techniques	

No.	Kompetensi Dasar	Pokok Bahasan	Sub Pokok Bahasan	Sumber Belajar
19.	Mampu memahami dan menjelaskan Abnormal Events	Abnormal Events	(a) Inspections following lightning strikes and HIRF penetration (b) Inspections following abnormal events such as heavy landings and flight through turbulence.	
20.	Mampu memahami dan menjelaskan Maintenance Procedures	Maintenance Procedures	Maintenance planning; Modification procedures; Stores procedures; Certification/release procedures; Interface with aircraft operation; Maintenance Inspection/Quality Control/Quality Assurance; Additional maintenance procedures. Control of life limited components.	