**KOMPETENSI INTI DAN KOMPETENSI DASAR**

**SEKOLAH MENENGAH KEJURUAN/MADRASAH ALIYAH KEJURUAN**

Bidang Keahlian : Teknologi dan Rekayasa

Program Keahlian : Teknologi Pesawat Udara

Kompetensi Keahlian : Airframe Powerplant

Tujuan kurikulum mencakup empat aspek kompetensi, yaitu (1) aspek kompetensi sikap spiritual, (2) sikap sosial, (3) pengetahuan, dan (4) keterampilan. Aspek-aspek kompetensi tersebut dicapai melalui proses pembelajaran intrakurikuler, kokurikuler, dan ekstrakurikuler.

Rumusan kompetensi sikap spiritual yaitu, “Menghayati dan mengamalkan ajaran agama yang dianutnya”. Sedangkan rumusan kompetensi sikap sosial yaitu, “Menghayati dan mengamalkan perilaku jujur, disiplin, santun, peduli (gotong royong, kerja sama, toleran, damai), bertanggung-jawab, responsif, dan proaktif melalui keteladanan, pemberian nasihat, penguatan, pembiasaan, dan pengkondisian secara berkesinambungan serta menunjukkan sikap sebagai bagian dari solusi atas berbagai permasalahan dalam berinteraksi secara efektif dengan lingkungan sosial dan alam serta dalam menempatkan diri sebagai cerminan bangsa dalam pergaulan dunia”. Kedua kompetensi tersebut dicapai melalui pembelajaran tidak langsung (*indirect teaching*) yaitu keteladanan, pembiasaan, dan budaya sekolah, dengan memperhatikan karakteristik mata pelajaran serta kebutuhan dan kondisi peserta didik.

Penumbuhan dan pengembangan kompetensi sikap dilakukan sepanjang proses pembelajaran berlangsung, dan dapat digunakan sebagai pertimbangan guru dalam mengembangkan karakter peserta didik lebih lanjut.

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| **KOMPETENSI INTI 3**  **(PENGETAHUAN)** | **KOMPETENSI INTI 4**  **(KETERAMPILAN)** |
| 1. **Memahami, menerapkan, menganalisis,** dan **mengevaluasi** tentang **pengetahuan faktual, konseptual, operasional dasar**, dan **metakognitif** sesuai dengan bidang dan lingkup kerja ***Airframe Powerplant*** pada tingkat teknis, spesifik, detil, dan kompleks, berkenaan dengan ilmu pengetahuan, teknologi, seni, budaya, dan humaniora dalam konteks pengembangan potensi diri sebagai bagian dari keluarga, sekolah, dunia kerja, warga masyarakat nasional, regional, dan internasional. | 1. Melaksanakan tugas spesifik dengan menggunakan alat, informasi, dan prosedur kerja yang lazim dilakukan serta memecahkan masalah sesuai dengan bidang kerja ***Airframe Powerplant*** . Menampilkan kinerja di bawah bimbingan dengan mutu dan kuantitas yang terukur sesuai dengan standar kompetensi kerja.   Menunjukkan keterampilan menalar, mengolah, dan menyaji secara efektif, kreatif, produktif, kritis, mandiri, kolaboratif, komunikatif, dan solutif dalam ranah abstrak terkait dengan pengembangan dari yang dipelajarinya di sekolah, serta mampu melaksanakan tugas spesifik di bawah pengawasan langsung.  Menunjukkan keterampilan mempersepsi, kesiapan, meniru, membiasakan, gerak mahir, menjadikan gerak alami dalam ranah konkret terkait dengan pengembangan dari yang dipelajarinya di sekolah, serta mampu melaksanakan tugas spesifik di bawah pengawasan langsung. |

Mata Pelajaran: ***Aircraft Structure***

| **KOMPETENSI DASAR** | **KOMPETENSI DASAR** | **WAKTU** | **UNIT KOMPETENSI** | **SKEMA SERTIFIKASI** |
| --- | --- | --- | --- | --- |
| 1. Memahami “*Airframe structures General Concept"* | 4.1 Mengelompokkan “*Airframe structures General concepts* " | **14** |  | A1  Tanda Lulus Ujian Persiapan Rangka Pesawat  (DKUPPU) |
| 1. Menganalisis *Aircraft Fuselage* | 4.2 Merawat*Aircraft Fuselage* | **14** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menganalisis : *Aircraft Wing* | 4.3 Merawat *Aircraft Wing* | **14** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menganalisis *Stabilizers and Flight Control Surfaces* | 4.4 Merawat *Stabilizers and Flight Control Surfaces* | **14** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan *Engine Nacelles/pylons* | 4.5 Merawat *Engine Nacelles/pylons* | **14** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan *daily inspection* | 4.6 Melaksanakan *daily inspection* | **14** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Mengevaluasi *safety belt* dan pemasangannya | 4.7 Melaksanakan inspeksi dan *tes*t terhadap *safety belt* dan pemasangannya | **14** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan *A/C Servicing* | 4.8 Melaksanakan A/C servicing | **20** | AC147-02-5.1  Safety Precaution in aviation maintenance |
| 1. Menerapkan *A/C Ground Handling* | 4.9 Melaksanakan *A/C Ground Handling* | **20** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menganalisis *“ lap patch repair of aircraft skin “* | 4.10 Melaksanakan pekerjaan *“ lap patch repair of aircraft skin “* | **26** | AC147-02-5.18  Lap Joint  AC147-02-5.11  Joint Type Angle (Rivet) |
| 1. Menganalisis pekerjaan *“ splice repair of stringer”* | 4.11 Melaksanakan pekerjaan *“ splice repair of stringer”* | **22** | AC147-02-5.19  Bending “L”  AC147-02-5.11  Joint Type Angle (Rivet) |
| 1. Mengevaluasi *symmetrical check* | 4.12 Melaksanakan *symmetrical check* | **22** | AC147-02-14.6  Measurement Device |
| 1. Mengevaluasi*replace and rig of aileron, elevator and Rudder* | 4.13 Melaksanakan *replace and rig of aileron, elevator and Rudder* | **42** | AC147-02-5.17  Control Cable Inspection/check  MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan*inspect and adjust flap* | 4.14 *Melaksanakan inspect and adjust flap* | **18** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Mengevaluasi*replacement of control wheel assembly* | 4.15 Melaksanakan *replacement of control wheel assembly* | **18** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan *adjust nose wheel locking devices* | 4.16 Melaksanakan *adjust nose wheel locking devices* | **18** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Mengevaluasi*jack an aircraft and perform landing gear retraction test* | 4.17 Melaksanakan *jack an aircraft and perform landing gear retraction test* | **18** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan *assembly main landing gear and wheel* | 4.18 Melaksanakan *assembly main landing gear and wheel* | **18** | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menganalisis *brake* | 4.19 Melaksanakan *inspect and adjust brake* | **10** | MEA105A  Apply quality standards applicable to maintenance processes |
| **JUMLAH JAM** | | **350** |  |  |

Mata Pelajaran: ***Aircraft System***

| **KOMPETENSI DASAR** | **KOMPETENSI DASAR** | **WAKTU** | **UNIT KOMPETENSI** | **SKEMA SERTIFIKASI** |
| --- | --- | --- | --- | --- |
| 1. Menganalisis unjuk kerja Air conditioning and Cabin Pressurization (ATA 21) | 1. Merawat Air conditioning and Cabin Pressurization (ATA 21) | 22 | MEA105A  Apply quality standards applicable to maintenance processes | A1  Tanda Lulus Ujian Persiapan Rangka Pesawat  (DKUPPU) |
| 1. Menganalisis unjuk kerja Instruments/Avionic Systems | 1. Merawat Instruments/ Avionic Systems | 20 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan Electrical Power (ATA 24) | 1. Merawat Electrical Power (ATA 24) | 20 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menganalisis Equipment and Furnishings (ATA 25) | 1. Merawat Equipment and Furnishings (ATA 25) | 16 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan Fire Protection (ATA 26) | 1. Merawat Fire Protection (ATA 26) | 18 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menganalisis Flights Control (ATA 27) | 1. Merawat Flights Control (ATA 27) | 20 | MEA105A  Apply quality standards applicable to maintenance processes  AC147-02-5.17  Control Cable Inspection/check |
| 1. Mengevaluasi Fuel Systems (ATA 28) | 1. Merawat Fuel Systems (ATA 28) | 20 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Mengevaluasi Hydraulic Power system (ATA 29) | 1. Merawat Hydraulic Power system (ATA 29) | 20 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan Ice and Rain Protection system (ATA 30) | 1. Merawat Ice and Rain Protection system (ATA 30) | 18 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan *Landing Gear system (ATA 32)* | 1. Merawat *Landing Gear system (ATA 32)* | 22 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan *Lights system (ATA 33)* | 1. Merawat *Lights system (ATA 33)* | 20 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan *Oxygen system (ATA 35)* | 1. Merawat *Oxygen system (ATA 35)* | 18 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Memahami *Pneumatic/ Vacuum system (ATA 36)* | 1. Merawat *Pneumatic/ Vacuum system (ATA 36)* | 22 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Memahami *Water/Waste system (ATA 38)* | 1. Merawat *Water/ Waste system (ATA 38)* | 20 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan pekerjaan *Open/remove A/C panels/component other than complete systems (all A/C types)* | 1. Melaksanakan *Open/ remove A/C panels/component other than complete systems (all A/C types)* | 16 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menganalisis Pekerjaan Perawatan yang tidak memerlukan pelepasan *system component* | 1. Melaksanakan Perawatan yang tidak memerlukan pelepasan *system component* | 22 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan pekerjaan *Close/ install A/C panels/ Components other than complete systems for limited A/C types as endorsed in the C of C* | 1. Melaksanakan *Close/ install A/C panels/ Components other than complete systems for limited A/C types as en-dorsed in the C of C* | 16 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan pekerjaan *Install mechanical A/C components/ systems for limited A/C types and ATA systems as endorsed in the C of C* | 1. Melaksanakan *Install mechanical A/C components/ systems for limited A/C types and ATA systems as endorsed in the C of C* | 16 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menerapkan *replace metal hydraulic pipe* | 1. Melaksanakan *replace metal hydraulic pipe* | 22 | MEA105A  Apply quality standards applicable to maintenance processes |
| 1. Menganalisis *hydraulic accumulator for installation and charging and fuctional test* | 1. Melaksanakan *test hydraulic accumulator for installation and charging and fuctional test* | 16 | MEA105A  Apply quality standards applicable to maintenance processes |
| **JUMLAH JAM** | | **384** |  |  |

Mata Pelajaran: ***Gas Turbine Engine***

| **KOMPETENSI DASAR** | **KOMPETENSI DASAR** | **WAKTU** | **UNIT KOMPETENSI** | **SKEMA SERTIFIKASI** |
| --- | --- | --- | --- | --- |
| 3.1 Memahami konsep dasar prinsip kerja GTE (*GTE Fundamentals*) | 1. Menghitung daya dorong (thrust) GTE | 12 |  | A4  Tanda Lulus Ujian Persiapan Motor Turbin  (DKUPPU) |
| 3.2 Memahami konsep pada *Turboprop, TurboShaft, turbojet, turbofan* | 1. Membedakan karakteristik *Turboprop, TurboShaft, turbojet, turbofan* | 12 |  |
| 3.3 Menilai kondisi bagian-bagian GTE (*Air Inlet, Compressors, Combustion Section, Turbine Section, Exhaust*) | 1. Merawat bagian-bagian GTE (*Air Inlet, Compressors, Combustion Section, Turbine Section, Exhaust*) | 14 |  |
| 3.4 Menilai kerja *Bearing and Seals* | 1. Merawa*t Bearing and Seals* | 12 | AC147-02-9.1  Bearing & Seals |
| 3.5 Menguji kerja berbagai *Engine Indication (engine instrument)* | 1. Memperbaiki berbagai *Engine Indication (engine instrument)* | 12 |  |
| 3.6 Menerapkan perawatan *Auxiliary Power Units (APUs)* | 1. *Merawat Auxiliary Power Units (APUs)* | 12 | MEA105A  Apply quality standards applicable to maintenance |
| 3.7 Menerapkan perawatan komponen-komponen pada Powerplant Installation | 1. Merawat komponen-komponen pada Powerplant Installation | 12 | MEA105A  Apply quality standards applicable to maintenance |
| 3.8 Menentukan *Engine Monitoring and Ground Operation* | 1. Melaksanakan *Engine Monitoring and Ground Operation* | 12 |  |
| * 1. Menerapkan*Engine Storage and Preservation* | 1. Melaksanakan *Engine Storage and Preservation* | 12 |  |
| * 1. Memahami prinsip starting dan ignition system | 1. Melaksanakan Starting dan ignition system | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menentukan perawatan Induction, Exhaust dan Cooling systems | 1. Merawat induction,   exhaust dan cooling system | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Memahami prinsip supercharging/turbocharging | 1. Merawat supercharging /   turbo-charging | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menentukan perawatan *Fuels system* | 1. Merawat *Fuels system* | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menentukan perawatan komponen *Lubrication Systems* | 1. Merawat komponen   *Lubrication Systems* | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menganalisis komponen *Air Systems* | 1. Merawat komp2onen *Air Systems* | 12 |  |
| * 1. Memahami prinsip kerja *Fire Protection Systems* | 1. Merawat *Fire Protection Systems* | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan Penyetelan :*idle RPM, maximum RPM, exhaust gas temperatur (EGT)* | 1. Melaksanakan penyetelan :*idle RPM, maximum RPM, exhaust gas temperatur (EGT)* | 12 |  |
| * 1. Menerapkan Pengujian *EGT indicating system* | 1. Melaksanakan pengujian *EGT indicating system* | 12 |  |
| * 1. Menerapkan*engine run up* | 1. Melaksanakan *engine run up* | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan *install and adjust fuel control, fuel pump, and fuel flow meter* | 1. Melaksanakan *install and adjust fuel control, fuel pump, and fuel flow meter* | 12 | MEA105A  Apply quality standards applicable to maintenance  AC147-02-9.13  Remove & install fuel filter engine |
| * 1. Menerapkan pelepasan dan pemasangan *heat exchanger* | 1. Melaksanakan pelepasan dan pemasangan *heat exchanger* | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan pelepasan dan pemasangan *ignition unit,ignitor plug , starter dan generator* | 1. Melakukan pelepasan dan pemasangan*ignition unit,ignitor plug , starter dan generator* | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan *hot section inspection* | 1. Melaksanakan *hot section inspection* | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan *daily inspection* terhadap motor turbin dan propeller | 1. Melaksanakan *daily inspection* terhadap motor turbin dan propeller | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Memahami jenis lubricants dan fuels | 1. Menyajikan karakteristik Lubricants dan fuels | 12 | AC147-02-9.12  Lubrication |
| * 1. Menerapkan perawatan Lubrication system | 1. Merawat lubrication system | 12 | MEA105A  Apply quality standards applicable to maintenance  AC147-02-9.12  Lubrication |
| * 1. Mengevaluasi unjuk kerja engine indication system | 1. Merawat engine indication system | 12 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan powerplant removal & installation | 1. Melaksanakan powerplant removal dan installation | 12 | MEA105A  Apply quality standards applicable to maintenance |
| 3.29 Mengevaluasi *Engine*  *Performance* | 1. Menguji *Engine Performance* | 12 | MEA105A  Apply quality standards applicable to maintenance |
| **JUMLAH JAM** | | **350** |  |  |

Mata Pelajaran: ***Piston Engine***

| **KOMPETENSI DASAR** | **KOMPETENSI DASAR** | **WAKTU** | **UNIT KOMPETENSI** | **SKEMA SERTIFIKASI** |
| --- | --- | --- | --- | --- |
| 1. Memahami konsep dasar prinsip kerja piston engine | 1. Menghitung tenaga piston   engine | 10 |  | A3  Tanda Lulus Ujian Persiapan Motor Piston  (DKUPPU) |
| 1. Menilai kondisi bagian-bagian piston engine | 1. Merawat bagian-bagian   piston engine | 15 |  |
| 1. Menentukan perawatan piston engine fuel systems | 1. Merawat piston engine   fuel systems | 10 | MEA105A  Apply quality standards applicable to maintenance |
| 1. Menentukan perawatan Carburetors | 1. Merawat Carburetors | 10 |  |
| 1. Menentukan perawatan Fuel Injection Systems; | 1. Merawat Fuel Injection   Systems | 10 | MEA105A  Apply quality standards applicable to maintenance |
| 1. Memahami prinsip Starting and Ignition Systems; | 1. Melaksanakan Starting   and Ignition Systems | 15 |  |
| 1. Menentukan perawatan Induction, Exhaust and Cooling Systems. | 1. Merawat Induction,   Exhaust and Cooling Systems | 10 | MEA105A  Apply quality standards applicable to maintenance |
| 3.8 Memahami prinsip kerja  Supercharging /Turbocharging | 4.8 Merawat Supercharging  /Turbocharging | 10 | MEA105A  Apply quality standards applicable to maintenance |
| 3.9 Memahami jenis lubricants and  fuels | 1. Menyajikan karakteristik lubricants and fuels | 10 | AC147-02-9.12  Lubrication |
| 3.10 Menentukan perawatan  lubrication systems | 1. Merawat lubrication systems | 10 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Mengevaluasi berbagai Engine Indication (Engine Instrument) | 1. Merawat berbagai Engine Indication (Engine Instrument); | 10 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan Powerplant removal and installation | 4.12 Melaksanakan Powerplant  removal and Installation | 10 | MEA105A  Apply quality standards applicable to maintenance |
| 3.13 Menerapkan Engine Monitoring  and Gound Operation | * 1. Melaksanakan Engine   Monitoring and Gound  Operation | 10 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan Engine Storage and Preservation | * 1. Melaksanakan Engine   Storage and Preservation | 10 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menentukan kondisi ignition unit | * 1. Melepas dan memasang   ignition unit | 10 | MEA105A  Apply quality standards applicable to maintenance |
| 3.16 Menentukan kondisi ignitor plug | * 1. Melepas dan memasang   ignitor plug | 10 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menentukan kondisi starter | * 1. Melepas dan memasang   starter | 10 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menentukan kondisi generator | * 1. Melepas dan memasang   generator | 10 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan engine run up | * 1. Melaksanakan engine run   up | 10 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Mengevaluasi Engine   Performance | * 1. Menguji Engine   Performance | 10 | MEA105A  Apply quality standards applicable to maintenance |
| **JUMLAH JAM** | | **210** |  |  |

Mata Pelajaran: ***Maintenance Practice***

| **KOMPETENSI DASAR** | **KOMPETENSI DASAR** | **WAKTU** | **UNIT KOMPETENSI** | **SKEMA SERTIFIKASI** |
| --- | --- | --- | --- | --- |
| 1. Menerapkan workshop practices | 1. Melaksanakan pekerjaan workshop practices | 20 | TLIF107C  Follow occupational health and safety procedures | A1  Tanda Lulus Ujian Persiapan Rangka Pesawat  (DKUPPU) |
| * 1. Menerapkan jenis jenis gambar dan diagram diagram, simbul, ukuran, toleransi dan proyeksi. | 1. Menerapkan jenis jenis gambar dan diagram diagram, simbul, ukuran, toleransi dan proyeksi. | 16 |  |
| * 1. Menganalisis aircraft Wiring diagrams dan schematic diagrams. | 1. Menerapkan aircraft Wiring diagrams dan schematic diagrams. | 12 |  |
| * 1. Menganalisis catatan gambar, , zone numbers, Station Numbers dan identifikasi lokasi pada pesawat udara. Ukuran antara dan tolerasi berikut penerapan tanda penyelesaian dari suatu permukaan. | 1. Menerapkan catatan gambar, , zone numbers, Station Numbers dan identifikasi lokasi pada pesawat udara. Ukuran antara dan tolerasi berikut penerapan tanda penyelesaian dari suatu permukaan. | 16 |  |
| * 1. Menerapkan pekerjaan Riveting pada proses perawatan dan perbaikan konstruksi pesawat udara | 1. Melaksanakan pekerjaan Riveting pada proses perawatan dan perbaikan konstruksi pesawat udara | 24 | AC147-02-5.11  Joint Type Angle (Rivet) |
| * 1. Menerapkan *inspection and testing* pada *Pipes and Hoses* | 1. Melaksanakan pekerjaan *inspection and testing* pada *Pipes and Hoses* | 20 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menganalisis kondisi *Electrical Cables and Connectors* | 1. Melaksanakan perbaikan *Electrical Cables and Connectors* | 20 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan *inspection and testing* pada Springs | 1. Melaksanakan pekerjaan *inspection and testing* pada Springs | 16 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan *inspection and testing* pada bearings | 1. Melaksanakan pekerjaan *inspection and testing* pada bearings | 20 | AC147-02-9.1  Bearing & Seals |
| * 1. Menerapkan *inspection and testing* pada Transmissions | 1. Melakukan *inspection and testing* pada Transmissions | 16 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan inspection , swaging and fitting pada Control Cables | 1. Melakukan inspection , swaging and fitting pada Control Cables | 24 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan pemeriksaan Fits and clearances | 1. Memeriksa Fits and clearances | 20 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Menerapkan pekerjaan *Sheet Metal* | 1. Melaksanakan pekerjaan *Sheet Metal* | 24 | AC147-02-5.18  Inspection Repairs dents in sheet metal  AC147-02-5.18  Cutting sheet metal |
| * 1. Menerapkan pekerjaan *composite and non-metallic* | 1. Melaksanakan pekerjaan *composite and non-metallic* | 24 | MEM07002B  Perform precision shaping/planning/slotting operations |
| * 1. Menerapkan pekerjaan *Welding, Brazing* | 1. Melaksanakan pekerjaan *Welding, Brazing,* | 20 |  |
| * 1. Menerapkan pekerjaan *Soldering and Bonding* | 1. Melaksanakan pekerjaan *Soldering and Bonding* | 20 |  |
| * 1. Menganalisis *Aircraft Weight and Balance* | 1. Melaksanakan *Aircraft Weight and Balance* | 20 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Mengevaluasi *Aircraft Handling and Storage* | 1. Melaksanakan *Aircraft Handling and Storage* | 20 |  |
| * 1. Mengevaluasi *Inspection and Repair Techniques* | 1. Melakukan *Inspection and Repair Techniques* | 24 |  |
| * 1. Mengevaluasi *dis-assembly and re-assembly techniques* | 1. Melaksanakan *dis-assembly and re-assembly techniques* | 24 | MEA105A  Apply quality standards applicable to maintenance |
| * 1. Mengevaluasi Proses *trouble shooting techniques* | 1. Melaksanakan pekerjaan *trouble shooting techniques* | 20 | MEA105A  Apply quality standards applicable to maintenance |
| **JUMLAH JAM** | | **420** |  |  |

Mata Pelajaran: **Produk Kreatif dan Kewirausahaan**

| **KOMPETENSI DASAR** | **KOMPETENSI DASAR** | **WAKTU** | **UNIT KOMPETENSI** | **SKEMA SERTIFIKASI** |
| --- | --- | --- | --- | --- |
| * 1. Menerapkan pola pikir kritis dan kreatif pada produk/layanan | * 1. Menganalisis peluang usaha pada produk/layanan | 5 |  |  |
| * 1. Mengklasifikasi sikap entrepreneur | * 1. Mengobservasi sikap entrepeneur pada pelaku usaha | 10 |  |  |
| * 1. Merancang desain, prototipe, dan kemasan produk | * 1. Membuat desain, prototipe, dan kemasan produk | 10 |  |  |
| * 1. Menganalisis proses kerja produksi pada pembuatan prototipe | * 1. Membuat alur dan proses kerja produksi | 10 |  |  |
| * 1. Merancang lembar kerja/gambar kerja produksi pada prototipe | * 1. Membuat lembar/gambar kerja | 10 |  |  |
| * 1. Menganalisis biaya produk pada prototipe | * 1. Menghitung biaya produk | 10 |  |  |
| * 1. Menerapkan proses kerja produksi pembuatan prototipe | * 1. Membuat prototipe | 40 |  |  |
| * 1. Menentukan pengujian kesesuaian fungsi produk prototype | * 1. Menguji prototype | 10 |  |  |
| * 1. Merencanakan proses produksi massal | * 1. Melakukan persiapan produksi massal | 10 |  |  |
| * 1. Merancang indikator keberhasilan tahapan produksi massal | * 1. Membuat indikator keberhasilan tahapan produksi miasal | 5 |  |  |
| * 1. Menerapkan proses produksi massal | * 1. Melakukan produksi masal | 60 |  |  |
| * 1. Menerapkan pola pikir kritis dan kreatif pada produk/layanan | * 1. Menganalisis peluang usaha pada produk/layanan | 5 |  |  |
| * 1. Menerapkan metoda perakitan produk/layanan | * 1. Melakukan perakitan produk | 60 |  |  |
| * 1. Menentukan pengujian kesesuaian fungsi produk | * 1. Melakukan pengujian produk/layanan | 20 |  |  |
| * 1. Menilai kesesuaian hasil produk dengan rancangan | * 1. Melakukan pemeriksaan produk sesuai dengan kriteria kelayakan produk/standar operasional | 10 |  |  |
| * 1. Memahami paparan deskriptif, naratif, argumentatif, atau persuasif tentang produk/layanan | * 1. Menyusun paparan deskriptif, naratif, argumentatif, atau persuasif tentang produk/layanan | 5 |  |  |
| * 1. Menentukan media promosi | * 1. Membuat media promosi berdasarkan segmentasi pasar | 20 |  |  |
| * 1. Menyeleksi strategi pemasaran | * 1. Melakukan pemasaran | 20 |  |  |
| * 1. Menilai perkembangan usaha | * 1. Membagankan perkembangan usaha | 10 |  |  |
| * 1. Menentukan standard laporan keuangan | * 1. Membuat Laporan Keuangan | 20 |  |  |
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