**Lampiran 3 : Kurikulum 2015**

**Matakuliah Paket TEL (Teknik Energi Listrik)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **SEMESTER 5** |  |  |  |
| **KODE** | **Paket Energi Listrik 1** | **K** | **P** | **T** |
| 303D4102 | Transmisi Arus Bolak-Balik | 2 | 0 | 2 |
| 304D4102 | Analisis Sistem Tenaga Listrik | 2 | 0 | 2 |
| 305D4102 | Pembangkit Tenaga Listrik | 2 | 0 | 2 |
| 306D4102 | Analisis Mesin Listrik 1 + Praktikum | 1 | 1 | 2 |
| 307D4102 | Sistem Proteksi 1 | 2 | 0 | 2 |
|   |   | 9 | 1 | 10 |
|  |  |  |  |  |
|  | **SEMESTER 6** |  |  |  |
| **KODE** | **Paket Energi Listrik 2** | **K** | **P** | **T** |
| 370D4102 | Distribusi Tenaga Listrik + Praktikum | 1 | 1 | 2 |
| 371D4102 | Sistem Proteksi 2 + Praktikum | 1 | 1 | 2 |
| 372D4102 | Analisis Mesin Listrik 2 + Praktikum | 1 | 1 | 2 |
| 373D4103 | Operasi Sistem Tenaga Listrik | 2 | 0 | 2 |
| 374D4103 | Teknik Tegangan Tinggi + Praktikum | 1 | 1 | 2 |
|   |   | 6 | 4 | 10 |
|  |  |  |  |  |
|  | **SEMESTER 7** |  |  |  |
| **KODE** | **Mata Kuliah Pilihan** | **K** | **P** | **T** |
| 410D4102 | Penggunaan Motor Listrik | 2 | 0 | 2 |
| 411D4102 | Kendali dan Kestabilan sistem tenaga listrik | 2 | 0 | 2 |
| 412D4102 | Keandalan dan kualitas sistem tenaga listrik | 2 | 0 | 2 |
| 413D4102 | Gardu induk dan peralatan sistem tenaga listrik | 2 | 0 | 2 |
| 414D4102 | Penggunaan komputer dalam sistem tenaga | 2 | 0 | 2 |
| 415D4102 | Kecerdasan buatan dalam sistem tenaga listrik | 2 | 0 | 2 |
| 416D4102 | Sistem cerdas tenaga listrik | 2 | 0 | 2 |
| 417D4102 | Analisis transien mesin listrik | 2 | 0 | 2 |
| 418D4102 | Pasar ketenagalistrikan | 2 | 0 | 2 |
| 419D4102 | Perkiraan beban listrik | 2 | 0 | 2 |
| 420D4102 | Sistem pembangkit listrik tersebar | 2 | 0 | 2 |
| 421D4102 | Sumber energi baru terbarukan | 2 | 0 | 2 |
| 422D4102 | Manajemen energi | 2 | 0 | 2 |
| 423D4102 | Sistem penyimpanan energi | 2 | 0 | 2 |
| 424D4102 | *Wide area monitoring* | 2 | 0 | 2 |
| 425D4102 | *Power system conditioner* | 2 | 0 | 2 |
| 426D4102 | *FACTS Devices* | 2 | 0 | 2 |
| 427D4102 | *Power system modelling and planning* | 2 | 0 | 2 |
| 428D4102 | Transmisi Arus Searah | 2 | 0 | 2 |
| 429D4102 | Rekayasa Nuklir | 2 | 0 | 2 |
| 430D4102 | Pemetaan Jaringan | 2 | 0 | 2 |
| 300D4102 | Opto Elektronika | 2 | 0 | 2 |
| 301D4102 | Iluminasi | 2 | 0 | 2 |
|   | Teknologi Isolasi + Praktikum | 1 | 1 | 2 |

**MK Paket TTI (Teknik Telekomunikasi & Informasi)**

|  |  |  |  |
| --- | --- | --- | --- |
| **MK Paket Semester 5 TTI** |  |  |  |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **B-1** | **Antenna dan Propagasi** | **8** | **2** | **10** |
| 310D4103 |  Antena dan Propagasi + Praktikum | 2 | 1 | 3 |
| 311D4102 |  Saluran Transmisi Telekomunikasi | 2 | 0 | 2 |
| 312D4103 |  Sistem Transmisi dan Frekuensi Tinggi + Praktikum | 2 | 1 | 3 |
| 313D4102 |  Komunikasi Satelit | 2 | 0 | 2 |
|   |   |   |   |   |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **B-2** | **Jaringan Telekomunikasi** | **8** | **1** | **9** |
| 314D4102 |  Jaringan Telekomunikasi Telepon | 2 | 0 | 2 |
| 315D4103 |  Teknologi *Switching* + PRAKTIKUM | 2 | 1 | 3 |
| 316D4102 |  Perangkat Lunak Telekomunikasi | 2 | 0 | 2 |
| 317D4102 |  Sistem Saluran Komunikasi Tenaga Listrik | 2 | 0 | 2 |
|   |   |   |   |   |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **B-3** | **Desain Jaringan Telekomunikasi**  | **8** | **1** | **9** |
| 314D4102 |  Jaringan Telekomunikasi Telepon | 2 | 0 | 2 |
| 318D4103 |  Sistem Berbasis Mikroprosessor + Praktikum | 2 | 1 | 3 |
| 316D4102 |  Perangkat Lunak Telekomunikasi | 2 | 0 | 2 |
| 319D4102 |  Perancangan Jaringan Teresterial  | 2 | 0 | 2 |
|  |  |  |  |  |
|  |  |  |  |  |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **B-4** | **Sistem Komunikasi (1)** | **8** | **1** | **10** |
| 313D4102 |  Komunikasi Satelit | 2 | 0 | 2 |
| 320D4102 |  Komunikasi Data  | 2 | 0 | 2 |
| 321D4103 |  Teknologi Jaringan Akses  | 2 | 0 | 2 |
| 322D4102 |  Komunikasi Serat Optik | 2 | 0 | 2 |
| 323D4102 |  Komunikasi Digital  | 2 | 0 | 2 |
|  |   |   |   |   |
| **MK Paket Semester 6 TTI** |  |  |   |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TTI-4** | **Sistem Nirkabel** | **8** | **1** | **10** |
| 380D4102 | Komunikasi Seluler | 2 | 0 | 2 |
| 381D4102 | Teknologi Nirkabel | 2 | 0 | 2 |
| 382D4102 | Manajemen dan Regulasi Telekomunikasi | 2 | 0 | 2 |
| 383D4102 | Spread Spectrum | 2 | 0 | 2 |
| 384D4102 | Teori Informasi dan Pengkodean | 2 | 0 | 2 |
|  |  |  |  |  |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TTI-6** | **Elektronika Telekomunikasi** | **8** | **1** | **9** |
| 385D4103 | Elektronika Telekomunikasi + Praktikum | 2 | 1 | 3 |
| 386D4102 | Sistem Telekomunikasi Cerdas | 2 | 0 | 2 |
| 387D4102 | Pengolahan Isyarat Digital | 2 | 0 | 2 |
| 388D4102 | Tapis Analog dan Digital | 2 | 0 | 2 |
|   |  |  |  |  |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TTI-8** | **Multimedia** | **8** | **1** | **9** |
| 389D4103 | Pengolahan Isyarat Multimedia + Praktikum | 2 | 1 | 3 |
| 390D4102 | Pengolahan Citra | 2 | 0 | 2 |
| 391D4102 | Pengolahan Isyarat Digital | 2 | 0 | 2 |
| 392D4102 | Sistem (Jaringan) Multimedia | 2 | 0 | 2 |
|  |  |  |  |  |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TTI-10** | **Sistem Komunikasi (2)** | **10** | **0** | **10** |
| 393D4102 | Rekayasa Trafik | 2 | 0 | 2 |
| 383D4102 | Spread Spectrum | 2 | 0 | 2 |
| 394D4102 | Kinerja Sistem Telekomunikasi | 2 | 0 | 2 |
| 395D4102 | Radar dan Navigasi | 2 | 0 | 2 |
| 386D4102 | Sistem Telekomunikasi Cerdas | 2 | 0 | 2 |

**MK Paket Semester 7**

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| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
|  |  | **4** | **0** | **4** |
| 431D4102 | Topik Khusus Jaringan Telekomunikasi | 2 | 0 | 2 |
| 432D4102 | Topik Khusus Wireless | 2 | 0 | 2 |
| 433D4102 | Topik Khusus Pengolahan Isyarat | 2 | 0 | 2 |
| 434D4102 | Topik Khusus Antena | 2 | 0 | 2 |
| 435D4102 | Pengenalan Pola | 2 | 0 | 2 |
| 436D4102 | Sistem Pengolahan dan Penapis Isyarat | 2 | 0 | 2 |
| 437D4102 | Komunikasi Seluler Lanjut | 2 | 0 | 2 |
| 438D4102 | Pemodelan dan Simulasi Sistem Telekomunikasi | 2 | 0 | 2 |
| 439D4102 | Sistem Informasi Telekomunikasi | 2 | 0 | 2 |
| 440D4102 | Optimisasi Jaringan Telekomunikasi | 2 | 0 | 2 |

**MK Paket TKKE (Teknik Kendali, Komputer & Elektronika)**

|  |  |  |  |
| --- | --- | --- | --- |
| **MK Paket Semester 5 TKKE** |  |  |  |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **C-1** | **Jaringan Komputer** | **9** | **1** | **10** |
| 324D4102 |  Jaringan Komputer + Praktikum | 1 | 1 | 2 |
| 320D4102 |  Komunikasi Data  | 2 | 0 | 2 |
| 325D4102 |  *Mobile Programming*  | 2 | 0 | 2 |
| 326D4102 |  *Web Programming*  | 2 | 0 | 2 |
| 327D4102 |  *Cloud Computing* | 2 | 0 | 2 |
|  |  |  |  |  |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **C-2** | **Sistem Kendali (1)** | **8** | **1** | **9** |
| 328D4103 |  Sistem Kendali + Praktikum | 2 | 1 | 3 |
| 329D4102 |  Teknologi Kendali Proses | 2 | 0 | 2 |
| 330D4102 |  Robotika Industri | 2 | 0 | 2 |
|   | *+ Pilih (lingkari angka di kolom 1 yang sesuai)* |   |   |   |
|   |  **MINIMAL 2 SKS:** |   |   |   |
| 301D4102 |  Illuminasi | 2 | 0 | 2 |
| 331D4103 |  Sistem Instrumentasi Elektronika + Praktikum | 2 | 1 | 3 |
| 332D4102 |  SCADA Berbasis Jaringan Komputer | 2 | 0 | 2 |
| 333D4102 |  Otomasi Industri + PRAKTIKUM (PLC) | 1 | 1 | 2 |
|   |   |   |   |   |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **C-3** | **Aplikasi Mikroprosessor** | **6** | **3** | **9** |
| 334D4103 |  Perancangan Sistem Digital + Praktikum | 2 | 1 | 3 |
| 318D4103 |  Sistem Berbasis Mikroprosesor + Praktikum | 2 | 1 | 3 |
|   | *+ Pilih (lingkari angka di kolom 1 yang sesuai)* |   |   |   |
|   |  **MINIMAL 3 SKS:** |   |   |   |
| 335D4103 |  Arsitektur Komputer 1 + Praktikum | 2 | 1 | 3 |
| 336D4103 |  Sistem Instrumentasi Elektronika + Praktikum | 2 | 1 | 3 |
| 337D4102 |  SCADA Berbasis Jaringan Komputer | 2 | 0 | 2 |
| 338D4102 |  Robotika Industri | 2 | 0 | 2 |
| 339D4102 |  Otomasi Industri + PRAKTIKUM (PLC) | 1 | 1 | 2 |

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| **MK Paket Semester 6 TKKE** |  |  |  |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TK-2** | **Arsitektur Komputer (2)** | **8** | **1** | **9** |
| 396D4103 | Arsitektur Komputer 2 | 2 | 1 | 3 |
| 397D4102 | Arsitektur Komputer Paralel | 2 | 0 | 2 |
| 398D4102 | Komputer Digital | 2 | 0 | 2 |
| 399D4102 | Evaluasi Kinerja Sistem Komputer | 2 | 0 | 2 |
|   |   |   |   |   |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TK-4** | **Sistem Komputer** | **10** | **0** | **10** |
| 480D4102 | Algoritma dan Struktur Data | 2 | 0 | 2 |
| 481D4102 | Sistem Operasi Komputer | 2 | 0 | 2 |
| 482D4102 | Aritmatika Komputer | 2 | 0 | 2 |
| 483D4102 | Pemrograman Berorientasi Obyek | 2 | 0 | 2 |
| 484D4102 | Pemrograman Komputer Lanjut | 2 | 0 | 2 |
|   |   |   |   |   |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TK-6** | **Pengolahan Isyarat** | **8** | **1** | **9** |
| 389D4103 | Pengolahan Isyarat Multimedia + Praktikum | 2 | 1 | 3 |
| 390D4102 | Pengolahan Citra | 2 | 0 | 2 |
| 391D4102 | Pengolahan Isyarat Digital | 2 | 0 | 2 |
| 388D4102 | Tapis Analog dan Digital | 2 | 0 | 2 |
|   |   |   |   |   |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TD-2** | **Sistem Kendali (2)** | **8** | **1** | **9** |
| 485D4102 | Sistem Kendali Digital + Praktikum | 2 | 1 | 3 |
| 486D4102 | Sistem Kendali Optimal | 2 | 0 | 2 |
| 487D4102 | Sistem Kendali Cerdas | 2 | 0 | 2 |
| 488D4102 | Perancangan Sistem Kendali | 2 | 0 | 2 |
|  |  |  |  |  |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TN-4** | **Divais** | **10** | **0** | **10** |
| 489D4102 | Rangkaian Penguat Operasional | 2 | 0 | 2 |
| 490D4102 | Teknologi Rangkaian Terintegrasi | 2 | 0 | 2 |
| 491D4102 | Divais Mikroelektronika | 2 | 0 | 2 |
| 492D4102 | Elektronika Terintegrasi Analog | 2 | 0 | 2 |
| 493D4102 | Bahasa Deskripsi Perangkat Keras | 2 | 0 | 2 |
|   |   |   |   |   |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TN-6** | **Elektronika & Kendali** | **6** | **3** | **9** |
| 379D4103 | Elektronika Daya + Praktikum | 2 | 1 | 3 |
| 494D4102 | Perancangan Sistem Tersemat + Praktikum | 2 | 1 | 3 |
| 495D4102 | Sistem Kendali Digital + Praktikum | 2 | 1 | 3 |

MK Paket Semester 7 TKKE

|  |  |  |  |  |
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| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TK-A** | **Aplikasi Komputer** | **4** | **0** | **4** |
| 441D4102 | Penggunaan Komputer dalam STL | 2 | 0 | 2 |
| 442D4102 | Pemodelan dan Simulasi Numerik | 2 | 0 | 2 |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TK-B** | **Pengenalan Pola (2)** | **4** | **0** | **4** |
| 435D4102 | Pengenalan Pola  | 2 | 0 | 2 |
| 443D4102 | Sistem Kecerdasan Buatan | 2 | 0 | 2 |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TD-A** | **Sistem Kendali (3)** | **4** | **0** | **4** |
| 444D4102 | Sistem Kendali Logika Terprogram | 2 | 0 | 2 |
| 445D4102 | Sistem Kendali Stokhastik | 2 | 0 | 2 |
|   |   |   |   |   |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TD-B** | **Pemodelan dan Simulasi** | **4** | **0** | **4** |
| 446D4102 | Pemodelan dan Simulasi Analog | 2 | 0 | 2 |
| 442D4102 | Pemodelan dan Simulasi Numerik | 2 | 0 | 2 |
| **KODE** | **PAKET dan Matakuliah** | **K** | **P** | **T** |
| **TN-A** | **Divais (3)** | **2** | **0** | **2** |
| 447D4102 | Sistem on Chip | 2 | 0 | 2 |
|   |   |   |   |   |
|   | **Topik Khusus** | **4** | **0** | **4** |
| 448D4102 | Topik Khusus Teknik Elektronika | 2 | 0 | 2 |
| 449D4102 | Topik Khusus Teknik Kendali | 2 | 0 | 2 |
| 450D4102 | Topik Khusus Teknik Komputer | 2 | 0 | 2 |
| 433D4102 | Topik Khusus Pengolahan Isyarat | 2 | 0 | 2 |
|   |   |   |   |   |
| **NEW** | **Matakuliah Baru Diusulkan** | **4** | **0** | **4** |
| 451D4102 | Microwave Remote Sensing | 2 | 0 | 2 |
| 452D4102 | Coding and Modulation Techniques | 2 | 0 | 2 |
| 453D4102 | Modulation Technology | 2 | 0 | 2 |
| 454D4102 | Computer Memory Systems | 2 | 0 | 2 |
| 455D4102 | Hybrid Computation | 2 | 0 | 2 |
| 456D4102 | Philosophy of Science | 2 | 0 | 2 |
| 457D4102 | Energy and Environment | 2 | 0 | 2 |
| 458D4102 | Pemrograman Paralel | 2 | 0 | 2 |

**Lampiran 4 : Tabel Kesetaraan**

**Lampiran 7 : GBRP**