**Kurikulum Program Studi D4 Teknologi Rekayasa Otomasi (TRO)**

| **Semester** | **Kode Mata Kuliah** | **Nama Mata Kuliah/Blok/ Modul1** | **Bobot SKS2** | | **RPS3** | **Keterangan (Pelaksanaan Merdeka Belajar)4** |
| --- | --- | --- | --- | --- | --- | --- |
| **Teori** | **Praktek** |
| **I** | TROMPK101 | 1. Bahasa Indonesia *(Indonesian Language)* | 2 | 0 |  |  |
| TROMKK101 | 1. Matematika Terapan *(Applied Mathematics)* | 1 | 1 |  |  |
| TROMKK102 | 1. Fisika Terapan   *(Applied Physics)* | 1 | 1 |  |  |
| TROMKB101 | 1. Komponen Elektronika *(Electronic Components)* | 1 | 1 |  |  |
| TROMKB102 | 1. Alat Ukur dan Pengukuran   *(Measuring and Measurement)* | 1 | 1 |  |  |
| TROMKB103 | 1. Rangkaian Listrik *(Electrical circuits 1)* | 1 | 1 |  |  |
| TROMKB104 | 1. Elektronika Analog *(Analog Electronics)* | 2 | 0 |  |  |
| TROMPB101 | 1. Pemograman Komputer *(Computer Programming)* | 0 | 2 |  |  |
| TROMPB102 | 1. Praktek Bengkel Elektronika Mekanik *(Mechanical Technology Basic Workshop)* | 0 | 2 |  |  |
|  | **Total Semester I** | | **9** | **9** | **18** |  |
| **II** | TROMPK201 | 1. Pancasila   *(Pancasila)* | 2 | 0 |  |  |
| TROMKB201 | 1. Pengantar Teknologi Informasi *(Introduction to Information Technology)* | 1 | 1 |  |  |
| TROMKB202 | 1. Elektronika Digital *(Digital Electronics)* | 2 | 0 |  |  |
| TROMKB203 | 1. Rangkaian Listrik 2 *(Electric Circuit 2)* | 1 | 1 |  |  |
| TROMPB201 | 1. Praktek Menggambar Teknik   *(Practice Drawing Techniques)* | 0 | 2 |  |  |
| TROMPB202 | 1. Praktikum Elektronika Analog (*Analog Electronics Laboratory)* | 0 | 2 |  |  |
| TROMPB203 | 1. Praktikum Elektronika Digital   *(Digital Electronics Laboratory)* | 0 | 2 |  |  |
| TROMPB204 | 1. Praktek Pengawatan dan Teknik Printed Circuit Boar   *(Wiring Practice and Printed Circuit Board Engineering Laboratory)* | 0 | 2 |  |  |
| TROMPB205 | 1. Praktikum Rangkaian Listrik   *(Electrical Circuit Laboratory)* | 0 | 2 |  |  |
|  | **Total Semester II** | | **6** | **12** | **18** |  |
| **III** | TROMKB301 | 1. Komunikasi Data dan Jaringan Komputer   *(Data Communication and Computer Networks)* | 2 | 0 |  |  |
| TROMKB302 | 1. Sistem Tertanam (*Embedded System)* | 2 | 0 |  |  |
| TROMKB303 | 1. Pengolahan Sinyal   *(Signal Processing)* | 2 | 1 |  |  |
| TROMKB304 | 1. Elektronika Industri *(Industrial Electronics)* | 2 | 0 |  |  |
| TROMKK301 | 1. Kimia Industri *(Chemical industry)* | 1 | 1 |  |  |
| TROMKK302 | 1. Statistika dan Probabilitas   *(Statistics and Probability)* | 1 | 1 |  |  |
| TROMPB301 | 1. Aplikasi Pemograman Komputer   *(Computer Programming Applications)* | 0 | 2 |  |  |
| TROMPB302 | 1. Praktikum Elektronika Industri *(Industrial Electronics Laboratory)* | 0 | 2 |  |  |
| TROMPB303 | 1. Praktikum Sistem Tertanam (*Embedded System Laboratory )* | 0 | 2 |  |  |
|  | **Total Semester III** | | **10** | **9** | **19** |  |
| **IV** | TROMKB401 | 1. Sistem Kendali   *(Control System)* | 2 | 1 |  |  |
| TROMKB402 | 1. Pengaturan Motor Listrik *(Electric Motor Control)* | 2 | 0 |  |  |
| TROMKB403 | 1. Teknik Interface *(Interface Engineering)* | 2 | 0 |  |  |
| TROMKB404 | 1. K3 dan Lingkungan *(K3 and Environment)* | 2 | 1 |  |  |
| TROMKB405 | 1. Sistem Instrumentasi *(Instrumentation System)* | 1 | 1 |  |  |
| TROMPB401 | 1. Praktikum Pengaturan Motor Listrik   *(Electric Motor Control Laboratory)* | 0 | 2 |  |  |
| TROMPB402 | 1. Praktikum Teknik Interface   *(Interface Engineering Laboratory )* | 0 | 2 |  |  |
| TROMPB403 | 1. Praktikum Jaringan Komputer   *(Computer network Laboratory)* | 0 | 2 |  |  |
| TROMPB404 | 1. Realisasi Rancangan 1   *(Design Realization 1)* | 0 | 2 |  |  |
| **V** | **Total Semester IV** | | **9** | **11** | **20** |  |
| TROMKB501 | 1. AI   (*Artifficial Intelligent*) | 2 | 1 |  |  |
| TROMKK501 | 1. Bahasa Inggris Keteknikan *(Engineering English)* | 1 | 1 |  |  |
| TROMKB502 | 1. Mekatronik   *(Mechatronics)* | 2 | 0 |  |  |
| TROMKB503 | 1. PLC   *(PLC)* | 2 | 1 |  |  |
| TROMPB501 | 1. Praktikum Sistem Kendali   *(Control System Laboratory)* | 0 | 2 |  |  |
| TROMPB502 | 1. Praktikum Mekatronika *(Mechatronics Laboratory )* | 0 | 2 |  |  |
| TROMPB503 | 1. Praktikum PLC   *(PLC Laboratory )* | 0 | 2 |  |  |
| TROMPB504 | 1. Praktikum Instrumentasi   *(Instrumentation Laboratory)* | 0 | 2 |  |  |
| TROMPK501 | 1. Etika dan Budaya SUMUT   (*SUMUT Ethics and Culture)* | 2 | 0 |  |  |
|  | **Total Semester V** | | **9** | **11** | **20** |  |
| **VI** | TROMKB601 | 1. Pemeliharaan dan Perbaikan (*Maintenance and Repair*) | 2 | 0 |  |  |
| TROMKB602 | 1. IoT   *(Internet of Things)* | 2 | 0 |  |  |
| TROMKB603 | 1. DCS dan SCADA *(DCS and SCADA)* | 1 | 1 |  |  |
| TROMKB604 | 1. Robot Industri *(Industrial Robot)* | 1 | 1 |  |  |
| TROMPB601 | 1. Aplikasi Database *(Database Application)* | 0 | 2 |  |  |
| TROMPB602 | 1. Praktikum Pemeliharaan dan Perbaikan *(Maintenance and Repair Laboratory )* | 0 | 2 |  |  |
| TROMPB603 | 1. Praktikum IoT *(Internet of Things Laboratory)* | 0 | 2 |  |  |
| TROMPB604 | 1. Praktikum DCS dan SCADA   *(DCS and SCADA Laboratory)* | 0 | 2 |  |  |
| TROMPB605 | 1. Praktikum Robot Industri   (*Industrial Robot Laboratory)* | 0 | 2 |  |  |
|  | **Total Semester VI** | | **6** | **12** | **18** |  |
| **VII** | TROMBB701 | 1. Manajemen Industri *(Industrial Management*) | 1 | 1 |  |  |
| TROMKK701 | 1. Penulisan Karya Ilmiah   *(Scientific Writing)* | 1 | 1 |  |  |
| TROMBB702 | 1. Technopreneurship   *(Technopreneurship)* | 1 | 1 |  |  |
| TROMBB703 | 1. Etika Profesi   *(Professional ethics)* | 1 | 1 |  |  |
| TROMPK701 | 1. Agama   (*Religion*) | 2 | 0 |  |  |
| TROMPB70 1 | 1. Magang / PKL (*Internships/ PKL*) | 0 | 6 |  |  |
| TROMKK702 | 1. Bahasa Mandarin (*Mandarin language*) | 2 | 0 |  |  |
| TROMPK702 | 1. Kewarganegaraan (*Civics Education*) | 2 | 0 |  |  |
|  | **Total Semester VII** | | **10** | **10** | **20** |  |
| **VIII** | TROMPB801 | 1. Skripsi (Skripsi) | 0 | 6 |  |  |
| TROMPB802 | 1. Magang / PKL (*Internships/ PKL*) | 0 | 4 |  |  |
| TROMPB803 | 1. Realisasi Rancangan 2   *(Design Realization 2)* | 0 | 2 |  |  |
| TROMPB804 | 1. Seminar   (*Seminar*) | 0 | 1 |  |  |
|  | **Total Semester VIII** | | **0** | **13** | **13** |  |
|  | **Total sks** | | **59** | **87** | **146** |  |

**Keterangan:**

|  |  |
| --- | --- |
| **Persentasi Kurikulum** | |
| **Berdasarkan SKS** | **Berdasarkan Jam** |
| Total keseluruhan SKS yaitu 146 SKS, Terbagi atas :   * Teori : 40.41 % (59 SKS) * Praktik : 59,59 % (87 SKS) | Total keseluruhan Jam yaitu 212 Jam, Terbagi atas :   * Teori : 27.83 % (59 Jam) * Praktik : 72.17% (153 Jam) |