**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)
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