

**Kurikulum Teknologi Rekayasa Otomasi - DTEO 2023-2028**

| Semester 1 |          |                                  |    |   |     |           |           |             |
|------------|----------|----------------------------------|----|---|-----|-----------|-----------|-------------|
| No         | Kode MK  | Nama Mata Kuliah                 | T  | P | SKS | T (menit) | P (menit) | Total menit |
| 1          | UG23490x | Agama                            | 2  | 0 | 2   | 100       | 0         | 100         |
| 2          | VE230101 | Probabilitas dan Statistik       | 2  | 0 | 2   | 100       | 0         | 100         |
| 3          | VE230102 | Material Listrik dan Elektronika | 1  | 1 | 2   | 50        | 170       | 220         |
| 4          | VE230103 | Rangkaian dan Pengukuran Listrik | 3  | 3 | 6   | 150       | 510       | 660         |
| 5          | VE230104 | Rangkaian Digital                | 1  | 2 | 3   | 50        | 340       | 390         |
| 6          | VW231903 | Matematika                       | 3  | 0 | 3   | 150       | 0         | 150         |
|            |          |                                  |    |   |     |           |           |             |
| Total      |          |                                  | 12 | 6 | 18  | 600       | 1020      | 1620        |

| Semester 2 |          |                            |    |   |     |           |           |             |
|------------|----------|----------------------------|----|---|-----|-----------|-----------|-------------|
| No         | Kode MK  | Nama Mata Kuliah           | T  | P | SKS | T (menit) | P (menit) | Total menit |
| 1          | VE230205 | Listrik Magnet             | 2  | 1 | 3   | 100       | 170       | 270         |
| 2          | VE230206 | Rangkaian Elektronika      | 1  | 3 | 4   | 50        | 510       | 560         |
| 3          | VE230207 | Algoritma dan Pemrograman  | 1  | 1 | 2   | 50        | 170       | 220         |
| 4          | VE230208 | Analisis Sinyal dan Sistem | 2  | 1 | 3   | 100       | 170       | 270         |
| 5          | VW231901 | Kimia Terapan              | 2  | 1 | 3   | 100       | 170       | 270         |
| 6          | VW231902 | Fisika Terapan             | 2  | 1 | 3   | 100       | 170       | 270         |
|            |          |                            |    |   |     |           |           |             |
| Total      |          |                            | 10 | 8 | 18  | 500       | 1360      | 1860        |

| Smt | Topik                               |
|-----|-------------------------------------|
| 1   | Dasar Matematika dan Kelistrikan    |
| 2   | Teknik Elektro, Proses, dan Analisa |
| 3   | Sistem Kontrol Sederhana            |
| 4   | Large Scale Industry                |
| 5   | Robotics                            |
| 6   | Magang                              |
| 7   | Digitalisasi Industri               |
| 8   | Desain Sistem                       |

| Semester 3 |          |                                   |    |    |     |           |           |             |
|------------|----------|-----------------------------------|----|----|-----|-----------|-----------|-------------|
| No         | Kode MK  | Nama Mata Kuliah                  | T  | P  | SKS | T (menit) | P (menit) | Total menit |
| 1          | UG234911 | Pancasila                         | 2  | 0  | 2   | 100       | 0         | 100         |
| 2          | UG234913 | Kewarganegaraan                   | 2  | 0  | 2   | 100       | 0         | 100         |
| 3          | VE230309 | Mesin Listrik dan Kontrol Gerak   | 2  | 2  | 4   | 100       | 340       | 440         |
| 4          | VE230310 | Mikroprosesor dan Sistem Embedded | 2  | 3  | 5   | 100       | 510       | 610         |
| 5          | VE230311 | Instrumentasi Industri            | 1  | 2  | 3   | 50        | 340       | 390         |
| 6          | VE230312 | Proyek 1: Desain Sistem Kontrol   | 1  | 3  | 4   | 50        | 510       | 560         |
|            |          |                                   |    |    |     |           |           |             |
| Total      |          |                                   | 10 | 10 | 20  | 500       | 1700      | 2200        |

| Semester 4 |          |                                    |   |    |     |           |           |             |
|------------|----------|------------------------------------|---|----|-----|-----------|-----------|-------------|
| No         | Kode MK  | Nama Mata Kuliah                   | T | P  | SKS | T (menit) | P (menit) | Total menit |
| 1          | VE230413 | Metode Numerik                     | 1 | 1  | 2   | 50        | 170       | 220         |
| 2          | VE230414 | Pengolahan Citra Digital           | 1 | 2  | 3   | 50        | 340       | 390         |
| 3          | VE230415 | Sistem Kontrol Proses              | 2 | 1  | 3   | 100       | 170       | 270         |
| 4          | VE230416 | DCS dan SCADA                      | 1 | 2  | 3   | 50        | 340       | 390         |
| 5          | VE230417 | PLC dan Aplikasinya                | 2 | 2  | 4   | 100       | 340       | 440         |
| 6          | VE230418 | Proyek 2: Bengkel Otomasi Industri | 1 | 3  | 4   | 50        | 510       | 560         |
|            |          |                                    |   |    |     |           |           |             |
| Total      |          |                                    | 8 | 11 | 19  | 400       | 1870      | 2270        |

| Semester 5 |          |                                |   |    |     |           |           |             |
|------------|----------|--------------------------------|---|----|-----|-----------|-----------|-------------|
| No         | Kode MK  | Nama Mata Kuliah               | T | P  | SKS | T (menit) | P (menit) | Total menit |
| 1          | VW231904 | Rekayasa Teknologi Cerdas      | 2 | 1  | 3   | 100       | 170       | 270         |
| 2          | UG234912 | Bahasa Indonesia               | 1 | 1  | 2   | 50        | 170       | 220         |
| 3          | VE230519 | Optimasi Industri              | 2 | 1  | 3   | 100       | 170       | 270         |
| 4          | VE230520 | Teknik Perawatan dan Perbaikan | 1 | 2  | 3   | 50        | 340       | 390         |
| 5          | VE230521 | Sistem Kendaraan Cerdas        | 1 | 2  | 3   | 50        | 340       | 390         |
| 6          | VE230522 | Proyek 3: Robot Industri       | 1 | 3  | 4   | 50        | 510       | 560         |
|            |          |                                |   |    |     |           |           |             |
| Total      |          |                                | 8 | 10 | 18  | 400       | 1700      | 2100        |

| Semester 6 |          |                                         |   |    |     |           |           |             |
|------------|----------|-----------------------------------------|---|----|-----|-----------|-----------|-------------|
| No         | Kode MK  | Nama Mata Kuliah                        | T | P  | SKS | T (menit) | P (menit) | Total menit |
| 1          | VW231905 | Proyek Industri: Magang                 | 0 | 14 | 14  | 0         | 2380      | 2380        |
| 2          | VE230623 | Standar, Regulasi dan Keselamatan Kerja | 2 | 0  | 2   | 100       | 0         | 100         |
| 3          | VE230624 | Manajemen Kualitas Terpadu              | 2 | 1  | 3   | 100       | 170       | 270         |
|            |          |                                         |   |    |     |           |           |             |
|            |          |                                         |   |    |     |           |           |             |
|            |          |                                         |   |    |     |           |           |             |
|            |          |                                         |   |    |     |           |           |             |
| Total      |          |                                         | 4 | 15 | 19  | 200       | 2550      | 2750        |

| Semester 7 |          |                                             |    |   |     |           |           |             |
|------------|----------|---------------------------------------------|----|---|-----|-----------|-----------|-------------|
| No         | Kode MK  | Nama Mata Kuliah                            | T  | P | SKS | T (menit) | P (menit) | Total menit |
| 1          | UG234916 | Aplikasi Teknologi dan Transformasi Digital | 3  | 0 | 3   | 150       | 0         | 150         |
| 2          | UG234914 | Bahasa Inggris                              | 2  | 0 | 2   | 100       | 0         | 100         |
| 3          | UG234915 | Teknopreneur                                | 2  | 0 | 2   | 100       | 0         | 100         |
| 4          | VE230725 | Sistem Kontrol Lanjut                       | 2  | 1 | 3   | 100       | 170       | 270         |
| 5          | VE230726 | Industrial Internet of Things               | 2  | 2 | 4   | 100       | 340       | 440         |
| 6          | VE230727 | Proyek 4: Digitalisasi Industri             | 1  | 3 | 4   | 50        | 510       | 560         |
|            |          |                                             |    |   |     |           |           |             |
| Total      |          |                                             | 12 | 6 | 18  | 600       | 1020      | 1620        |

| Semester 8 |          |                           |   |    |     |           |           |             |
|------------|----------|---------------------------|---|----|-----|-----------|-----------|-------------|
| No         | Kode MK  | Nama Mata Kuliah          | T | P  | SKS | T (menit) | P (menit) | Total menit |
| 1          | VE230828 | Ergonomi Industri         | 1 | 2  | 3   | 50        | 340       | 390         |
| 2          | VE230829 | Manajemen Proyek          | 2 | 1  | 3   | 100       | 170       | 270         |
| 3          | VE230830 | Strategi Pemasaran Produk | 0 | 2  | 2   | 0         | 340       | 340         |
| 4          | VE230831 | Proyek Akhir              | 0 | 6  | 6   | 0         | 1020      | 1020        |
|            |          |                           |   |    |     |           |           |             |
|            |          |                           |   |    |     |           |           |             |
|            |          |                           |   |    |     |           |           |             |
| Total      |          |                           | 3 | 11 | 14  | 150       | 1870      | 2020        |

| Semester   | T  | P  | SKS | T (menit) | P (menit) | Total menit |
|------------|----|----|-----|-----------|-----------|-------------|
| 1 s.d. 4   | 40 | 35 | 75  | 2000      | 5950      | 7950        |
| 5 s.d. 8   | 27 | 42 | 69  | 1350      | 7140      | 8490        |
| Total      | 67 | 77 | 144 | 3350      | 13090     | 16440       |
| Persentase |    |    |     | 20%       | 80%       | 100%        |

Keterangan:

|    |                    |
|----|--------------------|
| UG | MK Wajib Kurikulum |
|    | MK Penciri ITS     |
| VW | MK Penciri Vokasi  |
| VE | MK Prodi           |
|    | MK Capstone Design |