

**KURIKULUM MBKM TAHUN 2020 D4 TEKNIK OTOMASI LISTRIK INDUSTRI  
JURUSAN TEKNIK ELEKTRO-POLITEKNIK NEGERI JAKARTA  
UNTUK ANGKATAN TAHUN 2020 DAN SETERUSNYA**

**Semester 1**

| No            | KODE    | Mata Kuliah ( <i>Subject</i> )  | SKS       | Jam       | Jumlah SKS |          |
|---------------|---------|---|-----------|-----------|------------|----------|
|               |         |   |           |           | Teori      | Praktek  |
| 1             | PNJ1101 | Pendidikan Agama ( <i>Religious Education</i> )                                       | 2         | 3         | 2          | 0        |
| 2             | OLI1102 | Matematika Terapan ( <i>Applied Mathematics</i> )                                     | 2         | 4         | 1          | 1        |
| 3             | OLI1103 | Fisika Terapan ( <i>Applied Physics</i> )   | 2         | 3         | 2          | 0        |
| 4             | OLI1104 | Pengukuran Listrik ( <i>Electrical Measurement</i> )                                  | 2         | 3         | 2          | 0        |
| 5             | OLI1105 | Instalasi Listrik Domestik ( <i>Domestic Electricity Installation</i> )               | 2         | 3         | 2          | 0        |
| 6             | OLI1306 | Rangkaian Listrik 1 ( <i>Electrical Circuits 1</i> )                                  | 2         | 4         | 1          | 1        |
| 7             | OLI1307 | Elektronika Analog ( <i>Analog Electronics</i> )                                      | 2         | 4         | 1          | 1        |
| 8             | OLI1308 | Rancangan Listrik Domestik ( <i>Domestic Electricity Design</i> )                     | 2         | 4         | 1          | 1        |
| 9             | OLI1209 | Gambar Teknik ( <i>Engineering Drawings</i> )   | 2         | 5         | 0          | 2        |
| 10            | OLI1210 | Bengkel Mekanik & Listrik Dasar ( <i>Basic Mechanical &amp; Electrical Workshop</i> ) | 2         | 5         | 0          | 2        |
| <b>Jumlah</b> |         |   | <b>20</b> | <b>38</b> | <b>12</b>  | <b>8</b> |

**Semester 2**

| No            | KODE    | Mata Kuliah  | SKS       | Jam       | Jumlah SKS |           |
|---------------|---------|--|-----------|-----------|------------|-----------|
|               |         |  |           |           | Teori      | Praktek   |
| 1             | PNJ2101 | Pendidikan Pancasila ( <i>Pancasila Education</i> )  | 2         | 2         | 2          | 0         |
| 2             | OLI2102 | Mesin Listrik 1 ( <i>Electrical Machines 1</i> )   | 2         | 3         | 2          | 0         |
| 3             | OLI2303 | Rangkaian Listrik 2 ( <i>Electrical Circuits 2</i> )   | 2         | 4         | 1          | 1         |
| 4             | OLI2104 | Instalasi Listrik Industri ( <i>Industrial Electricity Installation</i> )                              | 3         | 4         | 3          | 0         |
| 5             | OLI2305 | Elektronika Digital ( <i>Digital Electronics</i> )   | 2         | 4         | 1          | 1         |
| 6             | OLI2306 | Rancangan Listrik industri ( <i>Industrial Electricity Design</i> )                                    | 3         | 5         | 1          | 2         |
| 7             | OLI2207 | Pemrograman Komputer ( <i>Computer Programming</i> )   | 2         | 5         | 0          | 2         |
| 8             | OLI2208 | Laboratorium Pengukuran & Rangkaian Listrik ( <i>Measurement &amp; Electrical Circuit Laboratory</i> ) | 2         | 5         | 0          | 2         |
| 9             | OLI2209 | Bengkel Instalasi Listrik Domestik ( <i>Domestic Electricity Installation Workshop</i> )               | 2         | 6         | 0          | 2         |
| <b>Jumlah</b> |         |  | <b>20</b> | <b>38</b> | <b>10</b>  | <b>10</b> |

**Semester 3**

| No            | KODE    | Mata Kuliah  | SKS       | Jam       | Jumlah SKS |          |
|---------------|---------|--|-----------|-----------|------------|----------|
|               |         |  |           |           | Teori      | Praktek  |
| 1             | PNJ3101 | Pendidikan Kewarganegaraan ( <i>Civic Education</i> )                                | 2         | 2         | 2          | 0        |
| 5             | OLI3302 | Sistem Kendali ( <i>Control System</i> )   | 2         | 4         | 1          | 1        |
| 3             | OLI3103 | K3 Listrik ( <i>Electrical Workplace Health and Safety</i> )                         | 2         | 3         | 2          | 0        |
| 4             | OLI3104 | Mesin Listrik 2 ( <i>Electrical Machines 2</i> )                                     | 2         | 4         | 2          | 0        |
| 5             | OLI3105 | Pembangkit Tenaga Listrik ( <i>Power plant</i> )                                     | 2         | 4         | 2          | 0        |
| 6             | OLI3206 | PLC Dasar ( <i>Basic PLC</i> )   | 2         | 5         | 0          | 2        |
| 7             | OLI3207 | Laboratorium Elektronika ( <i>Electronics Laboratory</i> )                           | 2         | 5         | 0          | 2        |
| 8             | OLI3208 | Laboratorium Mikrokontroler ( <i>Microcontroller Laboratory</i> )                    | 2         | 5         | 0          | 2        |
| 9             | OLI3209 | Bengkel Instalasi Tenaga dan Penerangan ( <i>Industrial Motor Control Workshop</i> ) | 2         | 6         | 0          | 2        |
| <b>Jumlah</b> |         |  | <b>18</b> | <b>38</b> | <b>9</b>   | <b>9</b> |

**Semester 4**

| No            | KODE    | Mata Kuliah  | SKS       | Jam       | Jumlah SKS |           |
|---------------|---------|--|-----------|-----------|------------|-----------|
|               |         |  |           |           | Teori      | Praktek   |
| 1             | PNJ4101 | Bahasa Indonesia ( <i>Indonesian</i> )   | 2         | 3         | 2          | 0         |
| 2             | OLI4102 | Sistem Komunikasi Data industri (Industrial Data Communication System)                                       | 2         | 3         | 2          | 0         |
| 3             | OLI4303 | Elektronika Daya ( <i>Power Electronics</i> )  | 2         | 4         | 1          | 1         |
| 4             | OLI4104 | Distribusi Tenaga Listrik ( <i>Power Distribution</i> )  | 2         | 3         | 2          | 0         |
| 5             | OLI4305 | Instalasi Tegangan Menengah dan Sistem Proteksi ( <i>Protection System and Medium Voltage Installation</i> ) | 3         | 5         | 1          | 2         |
| 6             | OLI4206 | Laboratorium Mesin Listrik ( <i>Electrical Machinery Laboratory</i> )  | 2         | 5         | 0          | 2         |
| 7             | OLI4207 | PLC Lanjut ( <i>Advanced PLC</i> )   | 2         | 5         | 0          | 2         |
| 8             | OLI4208 | Laboratorium SCADA ( <i>SCADA Laboratory</i> )   | 3         | 5         | 0          | 3         |
| 9             | OLI4209 | Bengkel Otomasi Industri ( <i>Industrial Automation Workshop</i> )   | 2         | 5         | 0          | 2         |
| <b>Jumlah</b> |         |  | <b>20</b> | <b>38</b> | <b>8</b>   | <b>12</b> |

**Semester 5**

| No            | KODE    | Mata Kuliah   | SKS       | Jam       | Jumlah SKS |           |
|---------------|---------|---|-----------|-----------|------------|-----------|
|               |         |   |           |           | Teori      | Praktek   |
| 1             | OLI5301 | Kewirausahaan ( <i>Entrepreneurship</i> )   | 2         | 4         | 1          | 1         |
| 2             | OLI5302 | Bahasa Inggris 1 ( <i>English 1</i> )   | 2         | 4         | 1          | 1         |
| 3             | OLI5103 | Sistem Otomasi Gedung ( <i>Building Automation System</i> )   | 2         | 4         | 2          | 0         |
| 4             | OLI5304 | Sistem Kendali Motor Listrik ( <i>Electric Motor Control System</i> )                                     | 2         | 4         | 1          | 1         |
| 5             | OLI5305 | Perancangan Gardu Distribusi ( <i>Design of Distribution Substation</i> )                                 | 2         | 4         | 1          | 1         |
| 6             | OLI5206 | Laboratorium Elektronika Daya & sistem Kendali ( <i>Power Electronics and Control System Laboratory</i> ) | 3         | 6         | 0          | 3         |
| 7             | OLI5307 | Internet of Things (IoT)  | 2         | 5         | 1          | 1         |
| 8             | OLI5208 | Bengkel SCADA ( <i>SCADA Workshop</i> )   | 3         | 6         | 0          | 3         |
| <b>Jumlah</b> |         |   | <b>18</b> | <b>37</b> | <b>7</b>   | <b>11</b> |

**Semester 6**

| No            | KODE    | Mata Kuliah  | SKS       | Jam       | Jumlah SKS |           |
|---------------|---------|--|-----------|-----------|------------|-----------|
|               |         |  |           |           | Teori      | Praktek   |
| 1             | OLI6101 | Manajemen Industri ( <i>Industrial Management</i> )  | 2         | 3         | 2          | 0         |
| 2             | OLI6102 | Metodologi Penelitian ( <i>Research Methodology</i> )                                      | 2         | 3         | 2          | 0         |
| 3             | OLI6303 | Manajemen Proyek ( <i>Project Management</i> )   | 2         | 4         | 1          | 1         |
| 4             | OLI6304 | Kualitas Daya Listrik ( <i>Power Quality</i> )   | 2         | 4         | 1          | 1         |
| 5             | OLI6305 | Etika profesi, Komunikasi dan Presentasi (Profession Etic, Communication and Presentation) | 2         | 4         | 1          | 1         |
| 6             | OLI6306 | Instrumentasi dan Proses Kontrol ( <i>Instrumentation and Process Control</i> )            | 2         | 4         | 1          | 1         |
| 7             | OLI6207 | Laboratorium Konversi Energi Baru Terbarukan (Renewable Energy Conversion Laboratory)      | 3         | 6         | 0          | 3         |
| 8             | OLI6208 | Bengkel Sistem Otomasi Gedung ( <i>Building Automation System Workshop</i> )               | 3         | 6         | 0          | 3         |
| <b>Jumlah</b> |         |  | <b>18</b> | <b>34</b> | <b>8</b>   | <b>10</b> |

**Semester 7**

| No |         | Mata Kuliah  | SKS       | Jam       | Jumlah SKS |           |
|----|---------|--|-----------|-----------|------------|-----------|
|    |         |  |           |           | Teori      | Praktek   |
|    |         | Magang (Internship)  |           |           |            |           |
|    |         | <b>Hard Skill</b>  |           |           |            |           |
| 1  | OLI7201 | K3 ( <i>Workplace Health and Safety</i> )                    | 2         | 2         |            | 2         |
| 2  | OLI7202 | Manajemen Proyek ( <i>Project Management</i> )               | 4         | 8         |            | 4         |
| 3  | OLI7203 | Implementasi Proyek ( <i>Project Implementation</i> )        | 4         | 8         |            | 4         |
| 4  | OLI7204 | Laporan Magang dan Uji ( <i>Internship Report and Test</i> ) | 4         | 8         |            | 4         |
|    |         | <b>Soft Skill</b>  |           |           |            |           |
| 5  | OLI7205 | Manajemen Waktu ( <i>Time Management</i> )                   | 3         | 6         |            | 3         |
| 6  | OLI7206 | Manajemen Kepemimpinan ( <i>Leadership Management</i> )      | 3         | 6         |            | 3         |
|    |         | <b>Jumlah</b>  | <b>20</b> | <b>38</b> | <b>0</b>   | <b>20</b> |

**Semester 8 (Reguler)**

| No | KODE    | Mata Kuliah                                  | SKS       | Jam       | Jumlah SKS |          |
|----|---------|--|-----------|-----------|------------|----------|
|    |         |  |           |           | Teori      | Praktek  |
| 1  | OLI8101 | Manajemen Mutu ( <i>Quality Management</i> ) | 2         | 3         | 2          | 0        |
| 2  | OLI8302 | Bahasa Inggris 2 ( <i>English 2</i> )        | 2         | 4         | 1          | 1        |
| 3  | OLI8203 | Skripsi ( <i>Final Project</i> )             | 6         | 31        | 0          | 6        |
|    |         | <b>Jumlah</b>                                | <b>10</b> | <b>38</b> | <b>3</b>   | <b>7</b> |

**Semester 8 (Pilihan 1 Program MBKM)**

| No | KODE    | Mata Kuliah   | SKS       | Jam       | Jumlah SKS |          |
|----|---------|---|-----------|-----------|------------|----------|
|    |         |   |           |           | Teori      | Praktek  |
| 1  | OLI8104 | MK di luar prodi ( <i>courses outside the study program</i> ) | 2         | 3         | 2          | 0        |
| 2  | OLI8302 | Bahasa Inggris 2 ( <i>English 2</i> )                         | 2         | 4         | 1          | 1        |
| 3  | OLI8203 | Skripsi ( <i>Final Project</i> )                              | 6         | 31        | 0          | 6        |
|    |         | <b>Jumlah</b>   | <b>10</b> | <b>38</b> | <b>3</b>   | <b>7</b> |

**Semester 8 (Pilihan 2 Program MBKM)**

| No | KODE    | Mata Kuliah   | SKS       | Jam       | Jumlah SKS |          |
|----|---------|---|-----------|-----------|------------|----------|
|    |         |   |           |           | Teori      | Praktek  |
| 1  | OLI8205 | Program MBKM ( <i>MBKM Programm</i> )<br>(wirausaha bidang otomasi/bina desa) | 10        | 38        | 2          | 0        |
|    |         | <b>Jumlah</b>   | <b>10</b> | <b>38</b> | <b>2</b>   | <b>0</b> |