

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <div>Universitas Negeri Surabaya</div> <div>Fakultas Teknik</div> <div>Program Studi S1 Teknik Informatika</div>                                                                                                         |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           | <div>Kode Dokumen</div> |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----|-----------|---------------------------|-------------------------|-----------|-------|--------|----|--------|----|--------|----|--------|---|--|--|--|--|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|--------|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|--|--|--|---|--|--|---|--|--|--|--|---|--|--|--|--|--------|--|--|--|--|---|--|--|--|---|---|---|--|--|--|--|--|--------|--|--|--|--|--|---|--|--|--|--|--|--|---|---|---|--|
| <div>RENCANA PEMBELAJARAN SEMESTER</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| MATA KULIAH (MK)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | KODE                                                                                                                                                                                                                     | Rumpun MK                                                                                                                                                                                                                                                                                                                      | BOBOT (sks)      |     |           | SEMESTER                  | Tgl Penyusunan          |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| Teori Otomata                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 5520203137                                                                                                                                                                                                               | Mata Kuliah Wajib Program Studi                                                                                                                                                                                                                                                                                                | T=3              | P=0 | ECTS=4.77 | 4                         | 15 Desember 2025        |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| OTORISASI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Pengembang RPS                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                | Koordinator RMK  |     |           | Koordinator Program Studi |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <div>.....</div>                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                | <div>.....</div> |     |           | PARAMITHA NERISAFITRA     |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| Model Pembelajaran                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Case Study                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| Capaian Pembelajaran (CP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CPL-PRODI yang dibebankan pada MK                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CPL-3                                                                                                                                                                                                                    | Mengembangkan pemikiran logis, kritis, sistematis, dan kreatif dalam melakukan pekerjaan yang spesifik di bidang keahliannya serta sesuai dengan standar kompetensi kerja bidang yang bersangkutan                                                                                                                             |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Capaian Pembelajaran Mata Kuliah (CPMK)                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CPMK - 1                                                                                                                                                                                                                 | Mahasiswa mampu menganalisis berbagai jenis bahasa formal dan model automata untuk mengidentifikasi solusi terhadap persoalan komputasi kompleks, dengan mempertimbangkan keterkaitan antar konsep dalam ilmu komputer dan perkembangan teknologi lintas disiplin.                                                             |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CPMK - 2                                                                                                                                                                                                                 | Mahasiswa mampu merancang dan mensimulasikan model automata (DFA, NFA, PDA, dan Turing Machine) yang merepresentasikan solusi terhadap masalah nyata di bidang informatika, serta mengimplementasikannya dalam bentuk program atau simulasi berbasis platform teknologi yang relevan dengan kebutuhan industri dan masyarakat. |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CPMK - 3                                                                                                                                                                                                                 | Mahasiswa mampu mengimplementasikan konsep dasar kerja sistem komputasi, seperti proses pengenalan pola dan pemrosesan bahasa formal, guna memecahkan masalah dalam bidang teknologi informasi.                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CPMK - 4                                                                                                                                                                                                                 | Mahasiswa mampu mengembangkan pemikiran logis, kritis, sistematis, dan kreatif dalam menerapkan model-model komputasi untuk menyelesaikan persoalan formal di bidang informatika, sesuai dengan standar kompetensi profesional yang berlaku.                                                                                   |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Matrik CPL - CPMK                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <table border="1"> <tr> <td>CPMK</td> <td>CPL-3</td> </tr> <tr> <td>CPMK-1</td> <td></td> </tr> <tr> <td>CPMK-2</td> <td></td> </tr> <tr> <td>CPMK-3</td> <td></td> </tr> <tr> <td>CPMK-4</td> <td>✓</td> </tr> </table> |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         | CPMK      | CPL-3 | CPMK-1 |    | CPMK-2 |    | CPMK-3 |    | CPMK-4 | ✓ |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| CPMK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CPL-3                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| CPMK-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| CPMK-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| CPMK-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| CPMK-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ✓                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| Matrik CPMK pada Kemampuan akhir tiap tahapan belajar (Sub-CPMK)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| <table border="1"> <tr> <th rowspan="2">CPMK</th> <th colspan="16">Minggu Ke</th></tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th></tr> <tr> <td>CPMK-1</td> <td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>CPMK-2</td> <td></td><td></td><td></td><td>✓</td><td></td><td></td><td>✓</td><td></td><td></td><td></td><td></td><td>✓</td><td></td><td></td><td></td><td></td></tr> <tr> <td>CPMK-3</td> <td></td><td></td><td></td><td></td><td>✓</td><td></td><td></td><td></td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>CPMK-4</td> <td></td><td></td><td></td><td></td><td></td><td>✓</td><td></td><td></td><td></td><td></td><td></td><td></td><td>✓</td><td>✓</td><td>✓</td><td></td></tr> </table> |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           | CPMK                    | Minggu Ke |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | CPMK-1 | ✓ | ✓ | ✓ |  |  |  |  |  |  |  |  |  |  |  |  |  | CPMK-2 |  |  |  | ✓ |  |  | ✓ |  |  |  |  | ✓ |  |  |  |  | CPMK-3 |  |  |  |  | ✓ |  |  |  | ✓ | ✓ | ✓ |  |  |  |  |  | CPMK-4 |  |  |  |  |  | ✓ |  |  |  |  |  |  | ✓ | ✓ | ✓ |  |
| CPMK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Minggu Ke                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                |                  |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1                                                                                                                                                                                                                        | 2                                                                                                                                                                                                                                                                                                                              | 3                | 4   | 5         | 6                         | 7                       | 8         | 9     | 10     | 11 | 12     | 13 | 14     | 15 | 16     |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| CPMK-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ✓                                                                                                                                                                                                                        | ✓                                                                                                                                                                                                                                                                                                                              | ✓                |     |           |                           |                         |           |       |        |    |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| CPMK-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                |                  | ✓   |           |                           | ✓                       |           |       |        |    | ✓      |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| CPMK-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                |                  |     | ✓         |                           |                         |           | ✓     | ✓      | ✓  |        |    |        |    |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |
| CPMK-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                |                  |     |           | ✓                         |                         |           |       |        |    |        | ✓  | ✓      | ✓  |        |   |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |   |  |  |   |  |  |  |  |   |  |  |  |  |        |  |  |  |  |   |  |  |  |   |   |   |  |  |  |  |  |        |  |  |  |  |  |   |  |  |  |  |  |  |   |   |   |  |

|                      |                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                    |                                                                                  |                 |                                 |                     |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------|---------------------------------|---------------------|
| Deskripsi Singkat MK |                                                                                                                                                            | Mata kuliah ini membahas dasar-dasar teori komputasi yang menjadi fondasi dalam memahami cara kerja mesin komputasi dan bahasa formal. Mahasiswa akan mempelajari berbagai model matematis dari mesin komputasi seperti finite automata, pushdown automata, dan Turing machine, serta hubungan antara model-model tersebut dengan kelas-kelas bahasa formal seperti regular language, context-free language, dan recursively enumerable language. |                                                                                                                                                                    |                                                                                  |                 |                                 |                     |
| Pustaka              |                                                                                                                                                            | Utama :                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                    |                                                                                  |                 |                                 |                     |
|                      |                                                                                                                                                            | 1. Introduction to Automata Theory, Languages, and Computation                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                    |                                                                                  |                 |                                 |                     |
|                      |                                                                                                                                                            | Pendukung :                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                    |                                                                                  |                 |                                 |                     |
|                      |                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                    |                                                                                  |                 |                                 |                     |
| Dosen Pengampu       |                                                                                                                                                            | Ervin Yohannes, S.Kom., M.Kom., M.Sc., Ph.D.                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                    |                                                                                  |                 |                                 |                     |
| Mg Ke-               | Kemampuan akhir tiap tahapan belajar (Sub-CPMK)                                                                                                            | Penilaian                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                    | Bantuk Pembelajaran, Metode Pembelajaran, Penugasan Mahasiswa, [ Estimasi Waktu] |                 | Materi Pembelajaran [ Pustaka ] | Bobot Penilaian (%) |
|                      |                                                                                                                                                            | Indikator                                                                                                                                                                                                                                                                                                                                                                                                                                         | Kriteria & Bentuk                                                                                                                                                  | Luring (offline)                                                                 | Daring (online) |                                 |                     |
| (1)                  | (2)                                                                                                                                                        | (3)                                                                                                                                                                                                                                                                                                                                                                                                                                               | (4)                                                                                                                                                                | (5)                                                                              | (6)             | (7)                             | (8)                 |
| 1                    | 1.Mengidentifikasi jenis bahasa formal dari suatu masalah<br>2.Memilih automata yang sesuai untuk memodelkan masalah<br>3.Menjelaskan hubungan antar model | 1.- Ketepatan klasifikasi bahasa<br>2.- Pemilihan model yang tepat<br>3.- Penalaran logis                                                                                                                                                                                                                                                                                                                                                         | Kriteria:<br>1.- Analisis benar, logis, dan lengkap<br>2.- Ada justifikasi pemilihan model<br><br>Bentuk Penilaian : Aktifitas Partisipasif                        | - Ceramah interaktif<br>- Diskusi kasus<br>- Latihan soal analisis 3x50          |                 |                                 | 5%                  |
| 2                    | 1.Mengidentifikasi jenis bahasa formal dari suatu masalah<br>2.Memilih automata yang sesuai untuk memodelkan masalah<br>3.Menjelaskan hubungan antar model | 1.- Ketepatan klasifikasi bahasa<br>2.- Pemilihan model yang tepat<br>3.- Penalaran logis                                                                                                                                                                                                                                                                                                                                                         | Kriteria:<br>1.- Analisis benar, logis, dan lengkap<br>2.- Ada justifikasi pemilihan model<br><br>Bentuk Penilaian : Aktifitas Partisipasif, Praktik / Unjuk Kerja | - Ceramah interaktif<br>- Diskusi kasus<br>- Latihan soal analisis 3x50          |                 |                                 | 10%                 |
| 3                    | 1.Mengidentifikasi jenis bahasa formal dari suatu masalah<br>2.Memilih automata yang sesuai untuk memodelkan masalah<br>3.Menjelaskan hubungan antar model | 1.- Ketepatan klasifikasi bahasa<br>2.- Pemilihan model yang tepat<br>3.- Penalaran logis                                                                                                                                                                                                                                                                                                                                                         | Kriteria:<br>1.- Analisis benar, logis, dan lengkap<br>2.- Ada justifikasi pemilihan model<br><br>Bentuk Penilaian : Aktifitas Partisipasif                        | - Ceramah interaktif<br>- Diskusi kasus<br>- Latihan soal analisis 3x50          |                 |                                 | 5%                  |
| 4                    |                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Bentuk Penilaian : Aktifitas Partisipasif, Praktik / Unjuk Kerja                                                                                                   |                                                                                  |                 |                                 | 10%                 |
| 5                    |                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Bentuk Penilaian : Aktifitas Partisipasif, Praktik / Unjuk Kerja                                                                                                   |                                                                                  |                 |                                 | 10%                 |
| 6                    |                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Bentuk Penilaian : Aktifitas Partisipasif, Praktik / Unjuk Kerja                                                                                                   |                                                                                  |                 |                                 | 10%                 |
| 7                    |                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Bentuk Penilaian : Aktifitas Partisipasif                                                                                                                          |                                                                                  |                 |                                 | 5%                  |
| 8                    |                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Bentuk Penilaian : Tes                                                                                                                                             |                                                                                  |                 |                                 | 5%                  |

|    |  |  |                                              |  |  |  |    |
|----|--|--|----------------------------------------------|--|--|--|----|
| 9  |  |  | Bentuk Penilaian :<br>Aktifitas Partisipasif |  |  |  | 5% |
| 10 |  |  | Bentuk Penilaian :<br>Aktifitas Partisipasif |  |  |  | 5% |
| 11 |  |  | Bentuk Penilaian :<br>Aktifitas Partisipasif |  |  |  | 5% |
| 12 |  |  | Bentuk Penilaian :<br>Aktifitas Partisipasif |  |  |  | 5% |
| 13 |  |  | Bentuk Penilaian :<br>Aktifitas Partisipasif |  |  |  | 5% |
| 14 |  |  | Bentuk Penilaian :<br>Aktifitas Partisipasif |  |  |  | 5% |
| 15 |  |  | Bentuk Penilaian :<br>Aktifitas Partisipasif |  |  |  | 5% |
| 16 |  |  | Bentuk Penilaian :<br>Tes                    |  |  |  | 5% |

#### Rekap Persentase Evaluasi : Case Study

| No | Evaluasi               | Persentase |
|----|------------------------|------------|
| 1. | Aktifitas Partisipasif | 70%        |
| 2. | Praktik / Unjuk Kerja  | 20%        |
| 3. | Tes                    | 10%        |
|    |                        | 100%       |

#### Catatan

- Capaian Pembelajaran Lulusan Prodi (CPL - Prodi)** adalah kemampuan yang dimiliki oleh setiap lulusan prodi yang merupakan internalisasi dari sikap, penguasaan pengetahuan dan ketrampilan sesuai dengan jenjang studinya yang diperoleh melalui proses pembelajaran.
- CPL yang dibebankan pada mata kuliah** adalah beberapa capaian pembelajaran lulusan program studi (CPL-Prodi) yang digunakan untuk pembentukan/pengembangan sebuah mata kuliah yang terdiri dari aspek sikap, ketrampilan umum, ketrampilan khusus dan pengetahuan.
- CP Mata kuliah (CPMK)** adalah kemampuan yang dijabarkan secara spesifik dari CPL yang dibebankan pada mata kuliah, dan bersifat spesifik terhadap bahan kajian atau materi pembelajaran mata kuliah tersebut.
- Sub-CPMK Mata kuliah (Sub-CPMK)** adalah kemampuan yang dijabarkan secara spesifik dari CPMK yang dapat diukur atau diamati dan merupakan kemampuan akhir yang direncanakan pada tiap tahap pembelajaran, dan bersifat spesifik terhadap materi pembelajaran mata kuliah tersebut.
- Indikator penilaian** kemampuan dalam proses maupun hasil belajar mahasiswa adalah pernyataan spesifik dan terukur yang mengidentifikasi kemampuan atau kinerja hasil belajar mahasiswa yang disertai bukti-bukti.
- Kreteria Penilaian** adalah patokan yang digunakan sebagai ukuran atau tolok ukur ketercapaian pembelajaran dalam penilaian berdasarkan indikator-indikator yang telah ditetapkan. Kreteria penilaian merupakan pedoman bagi penilai agar penilaian konsisten dan tidak bias. Kreteria dapat berupa kuantitatif ataupun kualitatif.
- Bentuk penilaian:** tes dan non-tes.
- Bentuk pembelajaran:** Kuliah, Responsi, Tutorial, Seminar atau yang setara, Praktikum, Praktik Studio, Praktik Bengkel, Praktik Lapangan, Penelitian, Pengabdian Kepada Masyarakat dan/atau bentuk pembelajaran lain yang setara.
- Metode Pembelajaran:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, dan metode lainnya yg setara.
- Materi Pembelajaran** adalah rincian atau uraian dari bahan kajian yg dapat disajikan dalam bentuk beberapa pokok dan sub-pokok bahasan.
- Bobot penilaian** adalah prosentasi penilaian terhadap setiap pencapaian sub-CPMK yang besarnya proposional dengan tingkat kesulitan pencapaian sub-CPMK tsb., dan totalnya 100%.
- TM=Tatap Muka, PT=Penugasan terstruktur, BM=Belajar mandiri.

