

Kurikulum Program Sarjana Program Studi Teknik Komputer TA 2019-2020

Konsentrasi : Cybersecurity & IoT

| No | Kode | Matakuliah | Course | SKS | Teori/Prak | Semester |
|-----------------|-------|-------------------------------------|--|-----------|----------------|----------|
| 1 | TK001 | Etika Profesi | Professional Ethics | 2 | T | 1 |
| 2 | TK002 | Lingkungan Bisnis | Business Environment | 2 | T | 1 |
| 3 | TK004 | Matematika Teknik | Engineering Mathematics | 4 | T | 1 |
| 4 | TK005 | Fotografi | Photography | 2 | T | 1 |
| 5 | TK006 | Ekonomi Kreatif | Creative Economy | 2 | T | 1 |
| 6 | TK007 | Instalasi Hardware | Hardware Installation | 2 | P | 1 |
| 7 | TK008 | Sistem Operasi | Operating System | 4 | 2T/2P | 1 |
| 8 | TK013 | Pendidikan Pancasila | Education of Indonesia Ideology | 2 | T | 1 |
| 9 | TK015 | Algoritma Komputer & Struktur Data | Computing Algorithms & Data Structure | 4 | 2T/2P | 1 |
| Subtotal | | | | 24 | 18T/6P | |
| 10 | TK011 | Pendidikan Agama / Etika Muslim | <i>Religious Education - Moslem Ethics</i> | | | 2 |
| 11 | TK012 | Pendidikan Agama / Etika Non-Muslim | <i>Religious Education - Non-Moslem Ethics</i> | 2 | T | 2 |
| 12 | TK016 | Jaringan Komputer 1 | Computer Networks 1 | 4 | 2T/2P | 2 |
| 13 | TK023 | Multimedia | Multimedia | 2 | P | 2 |
| 14 | TK017 | Pemrograman Python | Python Programming (Python Basic) | 4 | 2T/2P | 2 |
| 15 | TK059 | Keamanan Dasar & Kriptografi | Fundamental Security & Cryptography | 4 | T | 2 |
| 16 | TK060 | Matematika Teknik 2 | Engineering Mathematics 2 | 2 | T | 2 |
| 17 | TK018 | Keamanan Manusia & Organisasi | Human & Organizational Security | 2 | T | 2 |
| 18 | TK061 | OS Server & Sistem Admin | OS Server & System Admin | 4 | 2T/2P | 2 |
| 19 | TK036 | Dasar-dasar IoT | IoT Fundamentals | 2 | T | 2 |
| 20 | TK062 | Elektronika dan Sistem Digital | Electronics and Digital Systems | 4 | 2T/2P | 2 |
| Subtotal | | | | 30 | 20T/10P | |
| 21 | TK003 | Bahasa Inggris 1 | English 1 | 2 | T | 3 |
| 22 | TK021 | Pemrograman Web | Web Programming | 4 | 2T/2P | 3 |
| 23 | TK022 | Jaringan Komputer 2 | Computer Networks 2 (CCNA 2) | 4 | 2T/2P | 3 |
| 24 | TK067 | Pemrograman Python Lanjut | Advanced Python Programming | 4 | 2T/2P | 4 |
| 25 | TK027 | Kejahatan Cyber & Hukum Pidana | Cybercrime & Criminal Justice | 2 | T | 3 |
| 26 | TK034 | Sistem Pertahanan Jaringan | Network Defence System | 4 | 2T/2P | 3 |
| 27 | TK064 | Edge Computing | Edge Computing | 4 | 2T/2P | 3 |
| 28 | TK065 | Teknologi Sensor | Sensor Technology | 2 | T | 3 |
| 29 | TK066 | Pemrograman Seluler* | Mobile Programming* | 4 | 2T/2P | 3 |

| | | | Subtotal | 30 | 18T/12P | |
|----|-------|--------------------------------------|--|----|---------|---|
| 30 | TK014 | Bahasa Inggris 2 | English 2 | 2 | T | 4 |
| 31 | TK028 | Success Skill | Success Skill | 2 | T | 4 |
| 32 | TK031 | Jaringan Komputer 3 | Computer Network 3* (CCNA3) | 4 | 2T/2P | 4 |
| 33 | TK020 | Pengolahan Basisdata | Database Processing | 4 | 2T/2P | 4 |
| 34 | TK033 | Penilaian Kerentanan Sistem | System Vulnerability Assessment | 2 | T | 4 |
| 35 | TK068 | Sistem Pertahanan Jaringan Lanjut | Advanced Network Defence System | 4 | 2T/2P | 4 |
| 36 | TK063 | IoT Platform** | IoT Platform** | 2 | T | 4 |
| 37 | TK069 | IoT untuk Rumah Cerdas dan Gedung** | IoT for Smart Home & Building** | 4 | 2T/2P | 4 |
| 38 | TK043 | Bahasa Inggris 3 | English 3 | 2 | T | 4 |
| 39 | TK070 | Pemrograman Web Lanjut | Advanced Web Programming (php-back end) | 4 | 2T/2P | 4 |
| 40 | TK071 | Pengembangan Aplikasi Seluler Lanjut | Advanced Mobile Application Development | 4 | 2T/2P | 4 |
| | | | Subtotal | 34 | 22T/10P | |
| 41 | TK046 | Pendidikan Kewarganegaraan | Civic Educations | 2 | T | 5 |
| 42 | TK037 | Metodologi Penelitian | Research Methodology | 2 | T | 5 |
| 43 | TK038 | Bahasa Indonesia & Penulisan Ilmiah | Indonesian Language & Scientific Writing | 2 | T | 5 |
| 44 | TK072 | Komputasi Awan | Cloud Computing | 4 | 2T/2P | 5 |
| 45 | TK039 | Web Sistem & Keamanan** | Web System & Security** | 4 | 2T/2P | 5 |
| 46 | TK040 | Ethical Hacking** | Ethical Hacking** (CEH) | 4 | 2T/2P | 5 |
| 47 | TK049 | Analisis Malware & Respon Kejadian | Malware Analysis & Incident Response | 4 | 2T/2P | 5 |
| 48 | TK057 | Teknologi Deteksi Lokasi** | Location Detection Technologies** | 4 | 2T/2P | 5 |
| 49 | TK058 | IoT untuk Kota Cerdas** | IoT for Smart City** | 4 | 3T/1P | 5 |
| 50 | TK073 | Kecerdasan Buatan** | Artificial Intelligence** | 4 | 2T/2P | 5 |
| 51 | TK035 | Cybersecurity Standard & Audit* | Cybersecurity Standard & Audit* (ISO27001) | 2 | T | 5 |
| 52 | TK074 | UI/UX Design** | UI/UX Design** | 2 | P | 5 |
| | | | Subtotal | 38 | 23T/15P | |
| 53 | TK047 | Forensik Digital & Investigasi** | Digital Forensic & Investigation** (CHFI) | 4 | 3T/1P | 6 |
| 54 | TK048 | Mobile Security & Media Forensic** | Mobile Security & Media Forensic** | 4 | 2T/2P | 6 |
| 55 | TK075 | Machine Learning** | Machine Learning** | 4 | 3T/1P | 6 |
| 56 | TK076 | Pengembangan Perangkat Keras* | Hardware Development* (Drone & 3D Printer) | 4 | 2T/2P | 6 |
| 57 | TK041 | Jaringan Komputer 4* | Computer Network 4* (MTCNA & MTCRE) | 4 | 2T/2P | 6 |
| 58 | TK050 | Keamanan IoT* | Security of IoT* (Cisco) | 2 | 1T/1P | 6 |
| 59 | TK054 | Analisis Keamanan* | Security Analysis* | 4 | T | 6 |
| 60 | TK077 | Big Data* | Big Data* | 4 | 2T/2P | 6 |
| | | | Subtotal | 30 | 19T/11P | |
| 61 | TK032 | Kriptografi Lanjut* | Advanced Cryptography* | 4 | T | 7 |
| 62 | TK051 | Statistik* | Statistics* | 4 | 2T/2P | 7 |
| 63 | TK056 | Magang-16* | Internsip-16* (Practical Work) | 16 | T | 7 |

| | | | | | | |
|----|-------|---------------|-----------------------------------|------------|-----------------|---|
| 64 | TK078 | Magang-8* --> | Internsip-8* (Practical Work) --> | 8 | T | 7 |
| | | | Subtotal | 32 | 30T/2P | |
| 65 | TK053 | Skripsi <-- | Thesis <-- | 6 | T | 8 |
| | | | Subtotal | 6 | 6T | |
| | | | TOTAL | 224 | 161T/69P | |

Keterangan :

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|----|---|
| | Mata Kuliah Wajib = 84 SKS |
| * | Mata Kuliah Pilihan = 64 SKS (termasuk 8+16 SKS Magang), minimal diambil = 22 SKS |
| ** | Mata Kuliah Konsentrasi Cybersecurity = 38 SKS |
| ** | Mata Kuliah Konsentrasi IoT = 38 SKS |
| T | Perkuliahan di Ruang Kelas Teori atau Lapangan |
| P | Praktikum di Laboratorium Komputer atau Lapangan |

| | |
|--------------|----------------|
| Teori | Praktik |
| 69.64% | 30.36% |

Jumlah SKS Syarat Kelulusan = 144 SKS
MK Wajib 84 SKS + MK Pilihan 22 SKS + MK Konsentrasi 38 SKS = 144 SKS
 Jumlah total MK Teori ditawarkan = 156 SKS
 Jumlah total MK Praktik ditawarkan = 68 SKS
 Jumlah SKS MK Magang = 8 atau 16 SKS