

KURIKULUM PRODI S1 TEKNIK KOMPUTER
KONSENTRASI CYBER SECURITY DAN IOT

No	Kode MK	Nama Mata Kuliah	COURSE	SIFAT	TEORI/ PRAKTE K	SKS
SEMESTER 1						
1	TK001	Etika Profesi	Professional Ethics	Wajib	2T	2
2	TK013	Pendidikan Pancasila	Pancasila Education	Wajib	2T	2
3	TK003	Bahasa Inggris 1	English 1	Wajib	2T	2
4	TK005	Fotografi	Photography	Wajib	2T	2
6	TK006	Ekonomi Kreatif	Creative Economy	Wajib	2T	2
7	TK086	Pengantar Sistem Komputer (Praktikum)	Introduction to Computer Systems (Practical)	Wajib	2P	2
8	TK136	Extracurricular Courses	Extracurricular Courses	Wajib	0T	0
9	TK087	Matematika Diskrit	Discrete Mathematics	Wajib	2T	2
9	TK088	Aljabar Linear	Linear Algebra	Wajib	2T	2
10	TK011	Pendidikan Agama / Etika Muslim	Religious Education/Muslim Ethics	Wajib	2T	2
11	TK012	Pendidikan Agama / Etika Non-Muslim	Religious Education/Non-Muslim Ethics	Wajib	2T	2
12	TK023	Multimedia	Multimedia	Wajib	2P	2
SUBTOTAL SKS						20
SEMESTER 2						
13	TK002	Lingkungan Bisnis	Business Environment	Wajib	2T	2
14	TK046	Pendidikan Kewarganegaraan	Civic education	Wajib	2T	2
15	TK089	Mekanika	Mechanics	Wajib	2T	2
16	TK090	Organisasi dan Arsitektur Komputer (Teori)	Computer Organization and Architecture	Wajib	2T	2
17	TK014	Bahasa Inggris 2	English 2	Wajib	2T	2
18	TK136	Extracurricular Courses	Extracurricular Courses	Wajib	0T	0
19	TK015	Algoritma Komputer & Struktur Data	Computer Algorithms & Data Structures	Wajib	2T/2P	4
20	TK008	Sistem Operasi	Operating Systems	Wajib	2T/2P	4
21	TK004	Matematika Teknik	Engineering Mathematics	Wajib	2T	2
SUBTOTAL SKS						20
SEMESTER 3						
22	TK043	Bahasa Inggris 3	English 3	Wajib	2T	2
23	TK098	Kriptografi Dasar	Basic Cryptography	Wajib	2T	2
24	TK091	Pemrograman Dasar (Python)	Basic Programming (Python)	Wajib	2T/2P	4
25	TK020	Pengolahan Basisdata	Database Processing	Wajib	2T	2
26	TK092	Metode Numerik	Numerical Methods	Wajib	2T	2
27	TK136	Extracurricular Courses	Extracurricular Courses	Wajib	0T	0
28	TK016	Jaringan Komputer 1	Computer Networking 1	Wajib	2T/2P	4
29	TK093	Keamanan Dasar (CSCU)	Basic Security (CSCU)	Wajib	2T	2
30	TK082	Dasar-dasar IoT	IoT Fundamentals	Wajib	2T	2
31	TK119	Elektronika Dasar dan Rangkaian Listrik	Basic Electronics and Electrical Circuits	Wajib	2P	2
32	TK083	Bisnis Digital	Digital Business	Wajib	2T	2
SUBTOTAL SKS						24
SEMESTER 4						
33	TK021	Pemrograman Web	Web Programming	Wajib	2T/2P	4
34	TK085	Metodologi Penelitian Dasar	Basic Research Methodology	Wajib	2T	2
35	TK094	Pemrograman Berorientasi Object (Python)	Object-Oriented Programming (Python)	Wajib	2T/2P	4
36	TK120	Reverse Engineering	Reverse Engineering	Wajib	2T	2
37	TK038	Bahasa Indonesia & Penulisan Ilmiah	Indonesian Language & Scientific Writing	Wajib	2T	2
38	TK027	Kejahatan Cyber & Hukum Pidana	Cybercrime & Criminal Law	Wajib	2T	2
39	TK022	Jaringan Komputer 2	Computer Networks 2	Wajib	2T	2
40	TK096	Kecerdasan Buatan	Artificial Intelligence	Wajib	2T	2
41	TK097	Komputasi Awan (Konsentrasi Cyber)	Cloud Computing (Cyber Concentration)	Konsentrasi CyberSecurity	2P	2
43	TK114	Respon Kejadian Keamanan Siber (Konsentrasi Cyber)	Cybersecurity Incident Response (Cyber Concentration)	Konsentrasi CyberSecurity	2T	2
42	TK136	Extracurricular Courses	Extracurricular Courses	Wajib	0T	0
44	TK063	IoT Platform (Konsentrasi IoT)	IoT Platform (IoT Concentration)	Konsentrasi IoT	2T	2
45	TK099	Sistem Akuisisi Data (Konsentrasi IoT)	Data Acquisition Systems (IoT Concentration)	Konsentrasi IoT	2P	2
SUBTOTAL SKS						28
SEMESTER 5						
46	TK100	Metodologi Penelitian Lanjut	Advanced Research Methodology	Wajib	2T	2
47	TK101	Rekayasa Perangkat Lunak	Software Engineering	Wajib	2T	2
48	TK102	Big Data	Big Data	Wajib	2T	2
49	TK095	Statistik dan Probabilitas	Statistics and Probability	Wajib	2T	2
50	TK075	Machine Learning	Machine Learning	Wajib	2T/2P	4
51	TK103	Jaringan Komputer 3 (Konsentrasi Cyber)	Computer Networks 3 (Cyber Concentration)	Konsentrasi CyberSecurity	2T	2
52	TK034	Sistem Pertahanan Jaringan (Konsentrasi Cyber)	Network Defense Systems (Cyber Concentration)	Konsentrasi CyberSecurity	2T/2P	4
53	TK104	OS Server & Sistem Admin (Konsentrasi Cyber)	Server OS & System Admin (Cyber Concentration)	Konsentrasi CyberSecurity	2T	2
54	TK121	Threat Hunting & Cyber Threat Intelligence (Konsentrasi Cyber)	Threat Hunting & Cyber Threat Intelligence (Cyber Concentration)	Konsentrasi CyberSecurity	2T	2
55	TK134	Analisis Malware (Konsentrasi Cyber)	Malware Analysis (Cyber Concentration)	Konsentrasi CyberSecurity	2T	2
56	TK122	IoT Platform & Cloud Integration (Konsentrasi IoT)	IoT Platform & Cloud Integration (IoT Concentration)	Konsentrasi IoT	2T	2
57	TK062	Elektronika dan Sistem Digital (Konsentrasi IoT)	Electronics and Digital Systems (IoT Concentration)	Konsentrasi IoT	2T	2
58	TK123	IoT Embedded Systems (Konsentrasi IoT)	IoT Embedded Systems (IoT Concentration)	Konsentrasi IoT	2T/2P	4
59	TK124	Industrial IoT (Konsentrasi IoT)	Industrial IoT (IoT Concentration)	Konsentrasi IoT	2T	2
60	TK125	Sensor dan Aktuator untuk IoT (konsentrasi IoT)	Sensors and Actuators for IoT (IoT Concentration)	Konsentrasi IoT	2T	2
SUBTOTAL SKS						36
SEMESTER 6						
61	TK126	Bahasa Inggris 4 (TOEFL)	English 4 (TOEFL)		2T	2
62	TK127	Capstone Project Cyber (Konsentrasi Cyber)	Cyber Capstone Project (Cyber Concentration)	Konsentrasi CyberSecurity	2T	2
63	TK112	Cryptography Lanjut (Konsentrasi Cyber)	Advanced Cryptography (Cyber Concentration)	Konsentrasi CyberSecurity	2T	2
64	TK035	Cybersecurity Standard & Audit (Konsentrasi Cyber)	Cybersecurity Standard & Audit (Cyber Concentration)	Konsentrasi CyberSecurity	2T	2
65	TK040	Ethical Hacking (Konsentrasi Cyber)	Ethical Hacking (Cyber Concentration)	Konsentrasi CyberSecurity	2T/2P	4

66	TK113	Keamanan Web (Konsentrasi Cyber)	Web Security (Cyber Concentration)	Konsentrasi CyberSecurity	2T	2
67	TK128	Red Team & Blue Team Simulation (Konsenstrasi Cyber)	Red Team & Blue Team Simulation (Cyber Concentration)	Konsentrasi CyberSecurity	2P	2
68	TK047	Forensik Digital & Investigasi (Konsenstrasi Cyber)	Digital Forensics & Investigation (Cyber Concentration)	Konsentrasi CyberSecurity	2T	2
69	TK115	Jaringan Sensor Nirkabel (Konsentrasi IoT)	Wireless Sensor Networks (IoT Concentration)	Konsentrasi IoT	2T/2P	4
70	TK129	Integrasi IoT dengan Sistem Cloud (Konsentrasi IoT)	IoT Integration with Cloud Systems (IoT Concentration)	Konsentrasi IoT	2T/2P	4
71	TK130	Sistem Otonom Cerdas (Konsentrasi IoT)	Intelligent Autonomous Systems (IoT Concentration)	Konsentrasi IoT	2T/2P	4
72	TK064	Edge Computing dan Fog IoT (Konsentrasi IoT)	Edge Computing and Fog IoT (IoT Concentration)	Konsentrasi IoT	2T	2
73	TK131	Capstone Project IoT (Konsentrasi IoT)	IoT Capstone Project (IoT Concentration)	Konsentrasi IoT	2T	2
SUBTOTAL SKS						34
SEMESTER 7						
74	TK078	Magang (Pilihan)	Internship (Elective)	Pilihan	8T	8
75	TK044	Manajemen Strategik (Pilihan)	Strategic Management (Elective)	Pilihan	2T	2
76	TK109	Pemrograman Berorientasi Object Lanjut (Pilihan)	Advanced Object-Oriented Programming (Elective)	Pilihan	2T	2
77	TK110	Pemrograman Web Lanjut (Pilihan)	Advanced Web Programming (Elective)	Pilihan	2T	2
78	TK132	Digital Forensik Lanjut (Pilihan)	Advanced Digital Forensics (Elective)	Pilihan	2T	2
79	TK133	Robotika dan Otomasi IoT (Pilihan)	Robotics and IoT Automation (Elective)	Pilihan	2T	2
80	TK053	Skripsi	Thesis	Wajib	6T	6
SUBTOTAL SKS						24
SEMESTER 8						
81	TK078	Magang	Internship	Pilihan	8T	8
82	TK053	Skripsi	Thesis	Wajib	6T	6
SUBTOTAL SKS						14

KETERANGAN

- Mata Kuliah Wajib = 104 SKS
- Mata Kuliah Konsentrasi Cyber Security = 32 SKS
- Mata Kuliah Konsentrasi IoT = 32 SKS
- Mata Kuliah Pilihan = 18 SKS, Minimal diambil 8 SKS
- T

Perkuliahan di Ruang Kelas Teori atau Lapangan
- P

Perkuliahan di Laboratorium Komputer atau Lapangan

Jumlah SKS Syarat Kelulusan = 144 SKS

MK Wajib 104 SKS + MK Konsentrasi 32 SKS + MK Pilihan 8 SKS = 144 SKS

Jumlah total MK teori ditawarkan = 148 SKS

Jumlah total MK Praktik ditawarkan = 38 SKS

Jumlah SKS Magang = 8 SKS