

### 3 Curriculum: COMPUTER SCIENCE AND SECURITY - COS

#### 3.1 Data

- 1 Duration of Study (S-1) : 4 years
- 2 Academic Year : 2 Semesters  
Odd Semester: 1 July to 31 December  
Even Semester: 1 January to 30 June
- 3 Academic weeks / Semester : 16 (14 academics and 2 for examinations)  
Semester Credit Units (SKS) : 1 SKS (preparation, lecture, exercises)
- 4 Numbers of SKS per Semester : max 24 (academics)  
Total SKS for S-1 study : 144 – 160 SKS
- 5 Duration of one lecture : 50 Minutes
- 6 Number of Students per Subject : min. 12 Students
- 7 File Name : 03-Cur-COS-08-06-1.docx
- 8 Modification : Subject to Changes / 2017/07-15/PP

#### 3.2 Structure of Study

1	2	3	4	5	6	7	8
	<b>Semester 1 – 6:</b> Academic Education (see curriculum), OFSE (Oral Final Study Examination)						
	<b>Semester 7:</b> Research Semester (abroad) Thesis preparation						
	<b>Semester 8:</b> Internship (4 months) Thesis Defense, Graduation						

#### 3.3 Score

Grade Letter	Grade Wording	IULI	Indonesian Grade Points (GP)	Germany Grade Point	Grade Description	Student Representati
A	Excellent	86 - 100	4	1	Outstanding performance	10%
B	Good	71 - 85	3.0 - 3.9	2	Performance is considerably higher than the average requirements	25%
C	Satisfactory	56 - 70	2.0 - 2.9	3	Performance meets the average requirements	30%
D	Poor	46 - 55	1.0 – 1.9	4	Performance is poor and likely to lead to failure	25%
F	Fail	< 45	0	5	Performance does not meet the minimum criteria. Considerable further work is required	10%

### 3.4 Curriculum (SKS)

<b>University Compulsory Subjects</b>
<b>Faculty Compulsory Subjects</b>
<b>Department Compulsory Subjects</b>
<b>Elective Subjects</b>

### 03-Computer Science – COS

University Compulsory Subjects		Semester									
			1	2	3	4	5	6	7	8	Total
1	English	ENGL	2	2	2	2	1	1			10
2	Computer Network & IT Security	CNIS	2								2
3	Applied Statistics	MATH		2							2
4	Research Methodology	RESM		2							2
5	Environment Sciences	ENVI			2						2
6	Civics	CIVI				2					2
7	Ethics and Religious Philosophy	ETRP					2				2
8	Innovation & Product Development	PROD					2				2
9	E-Commerce	ECOM						2			2
10	Indonesian Language & Culture	IDLC						2			2
11	Pancasila	PANC						2			2
12	Oral Final Study Examination (OFSE)	OFSE						0			0
13	Research Semester	RESS							6		6
14	Elective : Internship / Project	INSP								3	3
15	Thesis / Thesis Defence	THES								6	6
<b>Total</b>			<b>4</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>45</b>

Engineering Faculty Compulsory Subjects		Semester									
			1	2	3	4	5	6	7	8	Σ
1	Introduction to Engineering	IENG	1								1
2	Chemistry*	CHEM	0								0
3	Material Science	MATS	2								2
4	Engineering Mathematics 1,2	MATH	3	3							6
5	Physics & Laboratory 1,2	PHYS	3	3							6
6	Algorithm, Programming 1, 2	PROG	3	3							6
7	Electrical Engineering & Laboratory 1, 2	ELEE	3	3							6

8	Engineering Drawing / CAD 1*	ENDR	3								3
9	Statics and Mechanics of Materials*	MECH		0							0
10	Manufacturing Process*	MFPR			0						0
11	Applied Mathematics	MATH			3						3
12	Metrology and Quality Control*	MEQC									0
13	Computer Aided Design – CAD 2 **	CADD									0
14	Engineering Economy***	EECO					2				2
15	System Design 1, 2***	SYSD					3	3			6
16	Engineering Management ***	EMGT						2			2
<b>Total</b>			<b>18</b>	<b>12</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>43</b>

Exclude: \*\*COS, \*\*ELE, \*\*\*INE

Department Compulsory Subjects			Semester								Σ
			1	2	3	4	5	6	7	8	
1	Logics	LOGI	3								3
2	Advanced Data Structure	ADDS		3							3
3	Discrete Mathematics	MATH		2							2
4	Collaboration and Com.	COCO			2						2
5	Digital Logic & Digital Systems	DLDS			2						2
6	Operating Systems	OPSY			3						3
7	Computer Architecture	COAR			4						4
8	Interfacing and Data Comm. 1,2	IFDC			2	2					4
9	Human Computer Interaction	HUCI				2					2
10	Cost & Mgt Accountancy	CMAC				3					3
11	Distribut. Database Systems	DDBS				3					3
12	Networking 1,2	NEWO				2	2				4
13	Operation Research	OPRE					3				3
14	Software Engineering	SWEN				2	2				4
15	Comp. Science & System Des.	CSSD					2	2			4
16	IT Security	OTSE				2	2	2			6
17	System Modeling & Simulation	SMSI						3			3
18	Elective Subjects (*)	ELEC					2	4			6
Department			3	5	13	16	13	11	0	0	61
Faculty			18	12	3	0	5	5	0	0	43
University			4	6	4	4	5	7	6	9	45
Total			27	23	20	20	23	23	6	9	149

### Electives

	Subjects	Abr.	1	2	3	4	5	6	7	8	Total
1	German Language 1 *)	GERM	2	2	2	2	2	2			12
2	German Language 2 **)	GERM	2	2							4
3	Mandarin	MAND	2	2	2	2	2				10
4	Business Arabic	ARAB	2	2	2	2	2				10
5	Computer Science Subjects	COSS					2	2			4