

Table C7 :Targeted Skills for the Second Year of CE Program.

Semester	TU	Module	Nbr H	ECTS	KU	TA	TD	SR	EP	DM	CT	LL	
S3	TU 9	Python	45	3	Yellow	Red	Red	Yellow					
		Web development 1	45	3	Orange		Yellow		Yellow			Orange	
		Mobile development	30	2	Orange		Yellow		Yellow			Orange	
		Mini project	22,5	1.5	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Red	
	TU 10	Design Methodology	30	2	Red	Yellow	Yellow	Yellow	Yellow				Orange
		Network Design	45	3	Red	Yellow	Yellow	Yellow	Yellow				Orange
		Embedded systems	30	2	Orange	Yellow	Orange	Orange	Yellow				Orange
		Advanced Linux	30	2	Orange	Yellow	Yellow	Yellow	Yellow				Orange
	TU 11	Analogue and digital transmission	45	3	Orange		Yellow	Yellow	Yellow				Orange
		Antennas and Propagation	30	2	Orange		Yellow	Yellow	Yellow				Orange
		Mini project	22,5	1.5	Yellow	Red	Yellow	Yellow	Yellow	Red	Yellow	Red	
	TU 11	Software Engineering	45	3	Orange	Orange	Yellow	Yellow	Yellow				Orange
		Advanced database	30	2	Orange	Orange	Yellow	Yellow	Yellow				Orange
		Mini Project	22,5	1.5	Yellow	Red	Yellow	Yellow	Yellow	Red	Yellow	Red	
	TU 12	English 3	22,5	1.5	Yellow							Red	Red
Industrial culture		30	2	Yellow	Yellow					Yellow	Orange	Orange	
Quality management		22,5	1.5	Yellow	Yellow					Yellow	Orange	Orange	
S4	TU 13	Network & System Administration	60	4	Orange	Red	Yellow	Yellow	Orange	Yellow		Orange	
		Web development 2	30	2	Orange		Yellow		Yellow			Orange	
		Cryptography	30	2	Red			Orange	Yellow			Orange	
		Security	45	3	Red	Red	Orange	Yellow	Yellow			Orange	
		Mini project	22,5	1	Orange	Orange	Yellow	Yellow	Yellow			Orange	
	TU 14	Mobile communication network 1	30	2	Red	Yellow	Orange	Orange	Yellow	Yellow		Orange	
		Access Methods of Networking	30	2	Red	Yellow	Yellow	Yellow	Yellow			Orange	
		Network Packet	45	3	Red	Yellow	Yellow	Yellow	Yellow			Orange	
	TU 14	J2EE	30	2	Orange		Orange	Yellow	Yellow			Orange	
		DataMining	30	2	Orange		Orange	Yellow	Yellow			Orange	
		Mobile development2	45	3	Orange		Orange	Yellow	Yellow			Orange	
			Leadership and communications	22,5	1	Yellow					Orange	Red	Red

	TU 15	English 4	22,5	1	Yellow							Red	Red
	TU 16	end-of-yearproject	120	3									

Tableau C- 8 :Targeted Skills for the Third Year of CE Program. (Network and Telecommunication engineering branch).

Semester	TU	Module	Nbr H	ECTS	KU	TA	TD	SR	EP	DM	CT	LL
S5	TU 17	CloudComputing	30	2	Yellow	Red	Yellow		Yellow	Red		
		BigData	30	2	Yellow	Red	Yellow		Yellow	Red		
		IOT	30	2	Orange	Red	Red	Red	Orange	Yellow		
		Mini-project	22,5	1.5	Orange	Orange	Yellow	Yellow	Yellow			
	TU 18	Mobile networks 2	30	2	Red	Yellow	Orange	Orange	Yellow	Yellow		
		Sensor networks	45	3	Red	Yellow	Orange	Orange	Yellow	Yellow		Orange
		Optical Networks	45	3	Orange		Yellow	Yellow				Orange
		Mini project	22,5	1.5	Yellow	Red	Orange	Yellow	Orange	Red		
	TU 19	Network planning and metrology	30	2	Yellow	Red	Yellow	Red	Yellow			Orange
		QoS and Wireless communication	30	2	Yellow	Yellow	Yellow	Yellow				Orange
		Prepare for huawei Certification	45	3	Orange	Orange	Yellow	Yellow	Orange			Red
		Mini project	22,5	1.5	Red	Red	Orange	Red	Orange	Yellow	Orange	Orange
	TU 20	Labor law	22,5	1.5						Yellow	Red	Yellow
		Prepare for English certificate B2	22,5	1.5						Yellow	Red	Red
Business creation		22,5	1.5								Orange	
S6	TU 21	End of studies project	450	30								

Tableau C- 9 :Targeted Skills for the Third Year of CE Program. (Software engineering branch).

Semester	TU	Module	Nbr H	ECTS	KU	TA	TD	SR	EP	DM	CT	LL
S5	TU 17	CloudComputing	30	2	Yellow	Red	Yellow		Yellow	Red		
		BigData	30	2	Yellow	Red	Yellow		Yellow	Red		
		IOT	30	2	Orange	Red	Red	Red	Orange	Yellow		
		Mini-project	22,5	1.5	Orange	Orange	Yellow	Yellow	Yellow			
	TU 18	Advanced Softwareengineering	45	3	Red	Yellow	Orange	Orange	Yellow	Yellow		
		Knowledge engineering	30	2	Red	Yellow	Orange	Orange	Yellow	Yellow		Orange
		Prepare for MERN Certification	45	3	Orange		Yellow	Yellow				Orange
		Mini-projet	22,5	1.5	Yellow	Red	Orange	Yellow	Orange	Red		
	TU 19	Distributed system	30	2	Yellow	Red	Yellow	Red	Yellow			Orange
		Formal development tool	45	3	Yellow	Yellow	Yellow	Yellow				Orange
		.net	30	2	Orange	Orange	Yellow	Yellow	Orange			Red
		Mini-projet	22,5	1.5	Red	Red	Orange	Red	Orange	Yellow	Orange	Orange
	TU 20	Labor law	22,5	1.5						Yellow	Red	Yellow
Prepare for English certificate B2		22,5	1.5					Yellow	Red	Red	Red	
Business creation		22,5	1.5								Orange	
S6	TU 21	End of studies project	450	30								