



FORM
ISO 9001: 2008- KLETU
 School of Electronics &
 Communication

Document #: FMCD2004

Rev: 1.0

Title: Curriculum structure semester wise
School of Electronics and Communication

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Year: 2016-20

Semester: VII

No	Code	Course	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
1	18EECC401	PC16: Wireless & Mobile Communication	PSC	3-0-0	3	3	50	50	100	3 hours
2	18EECE	PSE Elective 2	PSE	3-0-0	3	3	50	50	100	3 hours
3	18EECE	PSE Elective 3	PSE	3-0-0	3	3	50	50	100	3 hours
4	18EECE	PSE Elective 4	PSE	3-0-0	3	3	50	50	100	3 hours
5	18EECE	Open Elective 1	OE	3-0-0	3	3	50	50	100	3 hours
6	18EECE	PSE Elective 5	PSE	3-0-0	3	3	50	50	100	3 hours
7	15EHSA401	CIPE	M	2-0-0		2	50	50	100	3 hours
TOTAL				18-0-0	18	20	350	350	700	

ISA: In Semester Assessment **ESA:** End Semester Assessment **L:** Lecture **T:** Tutorials **P:** Practical

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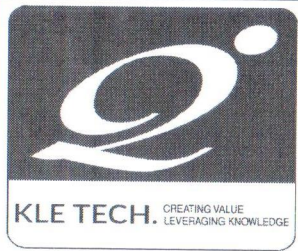
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Year: 2016-20

Electives- VII (2016-20)

No	Code	Course: PSE: Elective	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
1.	19EECE416	Biosensor	PSE	0-0-3	3	3	100	-	100	3Hours
2.	18EECE418	Advanced Digital Logic verification		0-0-3		6	100	-		
3.	18EECE410	Multimedia Communication		3-0-0		3	50	50		
4.	18EECE403	MEMS		3-0-0		3	50	50		
5.	18EECE419	Physical Design-Analog		0-0-3		6	100	-		
6.	18EECE413	ADDS		0-0-3		3	100	-		
7.	18EECE409	Design and Analysis of Algorithm		0-0-3		3	50	50		
8.	18EECE420	CMOS ASIC Design		0-0-3		6	100	-		
9.	18EECE405	Embedded Linux		0-0-3		3	50	50		
10.	18EECE411	Microwave & Antennas		3-0-0		3	50	50		
11.	18EECE406	AUTOSAR and Infotainment systems		3-0-0		3	50	50		
12.	18EECE414	Digital Image Processing		3-0-0		3	50	50		
13.	18EECE415	Cryptography & Network Security		3-0-0		3	50	50		
14.	19EECE401	Internet of Things		2-0-1		4	50	50		
15.	19EECE402	Information Theory and Coding		2-0-1		4	50	50		
16.	19EECE403	Testing & Characterization		0-0-3		6	100	-		
17.	17EECE310	Embedded Intelligent Systems		0-0-3		3	80	20		



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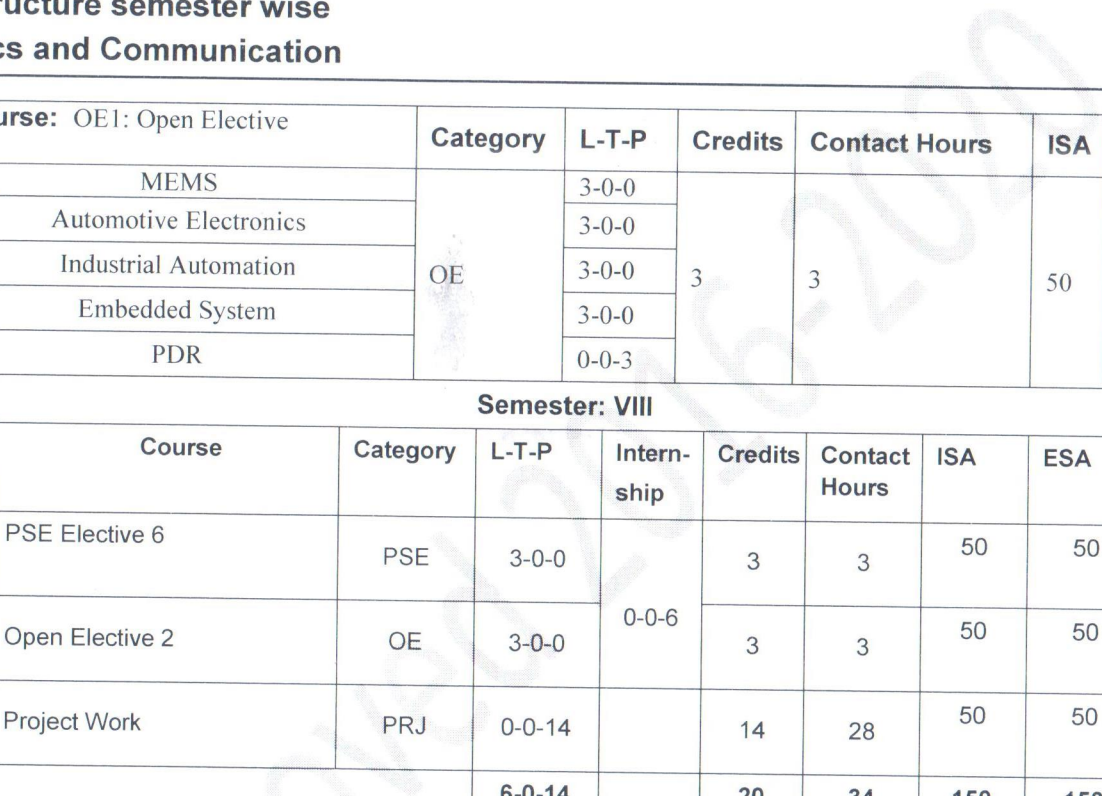
No	Code	Course: OEI: Open Elective	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
OEI	18EECO402	MEMS	OE	3-0-0	3	3	50	50	100	3Hours
	18EECO403	Automotive Electronics		3-0-0						
	18EECO405	Industrial Automation		3-0-0						
	18EECO404	Embedded System		3-0-0						
	17EECO401	PDR		0-0-3						

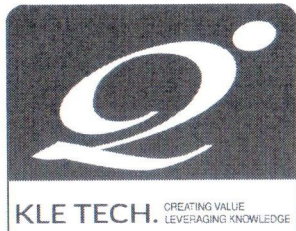
Semester: VIII

No	Code	Course	Category	L-T-P	Intern-ship	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
1	18EECE	PSE Elective 6	PSE	3-0-0	0-0-6	3	3	50	50	100	3 hours
2	18EECE	Open Elective 2	OE	3-0-0		3	3	50	50	100	3 hours
3	18EECW402	Project Work	PRJ	0-0-14		14	28	50	50	100	3 hours
TOTAL				6-0-14		20	34	150	150	300	

Internship- Training: 18EECI493 – 0-0-6, ISA: 80 ESA: 20
Internship- Project: 18EECW494-- 0-0-14, ISA: 50 ESA: 50

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Electives –VIII (2016 - 20)

No	Code	Course: PSE6: Elective	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
1.	18EECE414	Digital Image Processing		3-0-0	3	3				
	18EECE403	MEMS		3-0-0	3	3				
	19EECE422	Introduction to Deep Learning		2-0-1	3	4				
	18EECE402	Analog and Mixed Mode Circuits		3-0-0	3	3				

No	Code	Course: OE2: Open Elective	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
OE2	18EECO403	Automotive Electronics	OE	3-0-0	3	3	50	50	100	3Hours

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List of Program Electives

Verticals

V1: VLSI Systems	Course Code	V2: Embedded System	Course code	V3: Information & Signal Processing	Course code
CMOS ASIC Design	18EECE420	Internet of Things	19EECE401	Information Theory and Coding	19EECE402
Advanced Digital Logic Design	17EECE302	Computer Architecture	18EECE404	Multimedia Communication	18EECE410
Advanced Digital Logic Verification	18EECE418	Embedded Linux	18EECE405	Microwave & Antennas	18EECE411
Physical Design-Analog	18EECE419	Autosar and Infotainment systems	18EECE406	Satellite Communication	18EECE412
Analog Circuit Design	17EECE301	Multi Core Architecture and Programming	18EECE407	ADDS	18EECE413
VLSI Testing & Characterization	18EECE401	Algorithm Problem Solving	18EECE408	Digital Image Processing	18EECE414
Analog and Mixed Mode Circuits	18EECE402	Design and Analysis of Algorithm	18EECE409	Cryptography & Network Security	18EECE415
MEMS	18EECE403	Biosensor	19EECE416		
		Deep Learning	18EECE422		
		Embedded Computing Intelligence	17EECE310		

Open Electives	Course Code
Technical Writing	18EECO401
MEMS	18EECO402
Automotive Electronics	18EECO403
Embedded System	18EECO404
Industrial Automation	18EECO405

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Year: 2017-21

Semester: V

No	Code	Course	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
1	19EECC301	PC10:CMOS VLSI Circuits	PC	4-0-0	4	4	50	50	100	3 hours
2	17EECC302	PC11: Communication System	PC	4-0-0	4	4	50	50	100	3 hours
3	17EECC303	PC12: Digital Signal Processing	PC	4-0-0	4	4	50	50	100	3 hours
4	17EECC304	PC13: Operating System & Embedded Systems Design	PC	3-0-0	3	3	50	50	100	3 hours
5	17EECP301	PCL5: Communication and Signal processing Lab	PC	0-0-1	1	2	80	20	100	2 hours
6	17EECP302	PCL6: RTOS Lab	PC	0-0-1	1	2	80	20	100	2 hours
7	19EECP301	PCLx: CMOS VLSI Circuits Lab	PC	0-0-1	1	2	80	20	100	2 hours
8	17EECC307	PC15: Machine Learning	PC	2-0-1	3	4	50	50	100	3 hours
9	17EECW301	P1: Mini Project	PW	0-0-3	3	6	50	50	100	2 hours
TOTAL				17-0-7	24	31	520	280	800	

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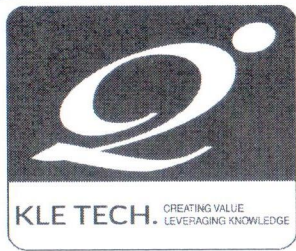
Semester: VI

No	Code	Course	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
1	16EHFC301	H3: Professional Aptitude and Logical reasoning.	HC	3-0-0	3	3	50	50	100	3 hours
2	17EECC305	PC13:Automotive Electronics	PC	3-0-0	3	3	50	50	100	3 hours
3	17EECC306	PC14:Computer Communication Networks	PC	4-0-0	4	4	50	50	100	3 hours
4	19EECC302	OOPS using C++		2-0-1	3	4	50	50	100	3 hours
5	17EECEXXX	PSE Elective 1	PE	3-0-0	3	3	50	50	100	3 hours
6	17EECP303	PCL7: Computer Communication Networks Lab	PC	0-0-1	1	2	80	20	100	2 hours
7	17EECP304	PCL8: Automotive Electronics Lab	PC	0-0-1	1	2	80	20	100	2 hours
8	17EECW302	P2: Minor Project	PW	0-0-6	6	12	50	50	100	2 hours
TOTAL				15-0-9	24	33	460	340	800	

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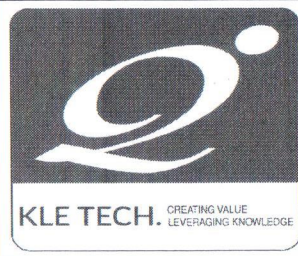
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Year: 2017-21

Elective VI (Batch 2017-21)

Semester: VI										
No	Code	Course: PSE1: Elective	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
PSE Elective 1	17EECE301	Analog Circuits Design	PSE	0-0-3	3	6	100		100	3Hours
	19EECE322	Introduction to Deep Learning		2-0-1		4	50	50		
	17EECE302	Advanced Digital Logic Design		0-0-3		3	100			
	17EECE307	Internet of Things		2-0-1		4	50	50		
	17EECE308	Information Theory and Coding		3-0-0		3	50	50		
	17EECE310	Embedded Intelligence Systems		0-0-3		9	80	20		


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Semester: VII

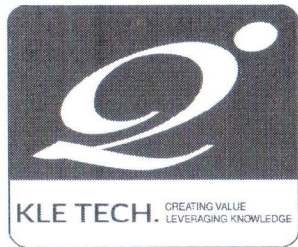
No	Code	Course	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
1	18EECC401	PC16: Wireless & Mobile Communication	PSC	3-0-0	3	3	50	50	100	3 hours
2	18EECE	PSE Elective 2	PSE	3-0-0	3	3	50	50	100	3 hours
3	18EECE	PSE Elective 3	PSE	3-0-0	3	3	50	50	100	3 hours
4	18EECE	PSE Elective 4	PSE	3-0-0	3	3	50	50	100	3 hours
5	18EECE	PSE Elective 5	PSE	3-0-0	3	3	50	50	100	3 hours
6	20EECW401	P3: Senior Design Project	PW	0-0-6	6	12	50	50	100	3 hours
7	15EHSC402	CIPE	M	2-0-0		2	50	50	100	3 hours
TOTAL				15-0-6	21	29	350	350	700	

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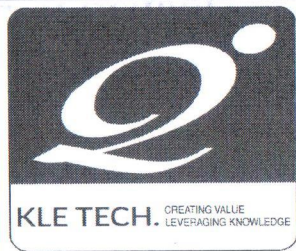


Semester: IV

No	Code	Course	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
1.	17EMAB208	BS: Linear Algebra & Partial Differential Equations	BS	4-0-0	4	4	50	50	100	3 hours
2.	18EECC209	ES4: Electromagnetic Fields and Waves	PC	3-0-0	3	3	50	50	100	3 hours
3.	19EECC203	PC5: Linear Integrated Circuits	PC	4-0-0	4	3	50	50	100	3 hours
4.	15EECC206	PC6: Control Systems	PC	4-0-0	4	4	50	50	100	3 hours
5.	15EECC207	PC7: ARM Processor & Applications	PC	3-0-0	3	3	50	50	100	3 hours
6.	15EECC208	PC8: Digital System Design using Verilog	PC	0-0-2	2	4	80	20	100	2 hours
7.	15EECP203	PCL3: Data acquisition and controls Lab	PC	0-0-1	1	2	80	20	100	2 hours
8.	15EECP204	PCL4: ARM Microcontroller Lab	PC	0-0-1	1	2	80	20	100	2 hours
9.	19EECF201 19EECF202	PCL3: Data Structure Applications Lab PCL3: Data Structure Lab(Diploma)	ES	0-0-2	2	4	80	20	100	2 hours
TOTAL				18-0-6	24	35	570	330	900	

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Semester: III

No	Code	Course	Category	L-T-P	Credits	Contact Hours	ISA	ESA	Total	Exam Duration
1	15EMAB203	BS: Integral Transforms and Statistics	BS	4-0-0	4	4	50	50	100	3 hours
2	15EECC201	PC1: Circuit Analysis	PC	4-0-0	4	4	50	50	100	3 hours
3	15EECC202	PC2: Analog Electronic Circuits	PC	4-0-0	4	4	50	50	100	3 hours
4	19EECC201	PC3: Digital Circuits	PC	4-0-0	4	3	50	50	100	3 hours
5	19EECC202	PC4: Signals & Systems	ES	4-0-0	4	3	50	50	100	2 hours
6	15EECP201	PCL1: Digital Circuits Lab	PC	0-0-1	1	2	80	20	100	2 hours
7	15EECP202	PCL2: Analog Electronic Circuits Lab	PC	0-0-1	1	2	80	20	100	2 hours
8	15EECF202 18EECF204	ES2: Microcontroller Architecture & Programming C Programming	ES	0-0-2	2	2	80	20	100	2 hours
TOTAL				20-0-04	24	30	490	310	800	

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FIRST SEMESTER B E PROGRAMSCHEME FOR 2019-2020

Electrical Science Stream

This stream comprises of Departments of Electrical Engg / Electronics & communication Engg /Computer Science and Engg.

No	Code	Course	Category	L-T-P	Credits	Contact Hours	CIE	SEE	Total	Exam Duration
1	18EMAB101	Single Variable Calculus	BS	4-1-0	5	6	50	50	100	3 hrs
2	15EPHB101	Engineering Physics	BS	3-0-0	3	3	50	50	100	3 hrs
3	15ECVF101	Engineering Mechanics	ES	4-0-0	4	4	50	50	100	3 hrs
4	18ECSP101	C Programming for Problem solving	ES	0-0-3	3	6	80	20	100	3 hrs
5	18EEEF101	Basic Electrical Engineering	ES	3-0-0	3	3	50	50	100	3 hrs
6	15EHSP101	Social Innovation	HSS	0-1-1	2	3	50	50	100	1.5hrs
7	16EPHP101	Engineering Physics Lab	BS	0-0-1	1	2	80	20	100	3 hrs
Total				14-2-5	21	27				

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SECOND SEMESTER B E PROGRAMSCHEME FOR 2019-20

Electrical Science Stream

This stream comprises of Departments of Electrical Engg / Electronics & communication Engg /Computer Science and Engg.

No	Code	Course	Catego	L-T-P	Credit	Contact Hours	ISA	ESA	Total	Exam Duration
1	18EMAB102	Multivariable Calculus	BS	4-1-0	5	6	50	50	100	3 hrs
2	15ECHB102	Engineering Chemistry	BS	3-0-0	3	3	50	50	100	3 hrs
3	18ECSP102	Problem Solving with Data Structures	ES	0-0-3	3	6	80	20	100	3 hrs
4	15ECRP101	Engineering Exploration	ES	0-0-3	3	6	80	20	100	3 hrs
5	18EECF101	Basic Electronics	ES	4-0-0	4	4	50	50	100	3 hrs
6	15EMEF101	Basic Mechanical Engg.	ES	2-1-0	3	4	50	50	100	3 hrs
7	15EHSH101	Professional Communication	HSS	1-1-0	2	3	50	50	100	1.5 hrs
Total				15-2-6	23	32				

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