MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES AND RESEARCH IN **ELECTRONICS**

MSc Electronics CBCS Course Structure

1 Semester

Hard Core

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Sl.		
No.	Course	Credits
1	ELH 401- Analog Devices and Circuits	4
2	ELH 402- Digital System Design	4
3	ELH 403 – Microprocessors and Microcontroller	3
Soft	Core	
Sl.		
	Course	Credits
1	ELS 404 - Programming in C	
2	ELS 405 – Power Electronics	3
3	ELS 406 – Network Analysis	
4	ELS 407 – Verilog HDL	
5	ELS 408 – Signals and Systems	1
Pract		
1	ELP 411 – Analog and Digital Experiments	3
2	ELP 412 – Microprocessor and Microcontroller programming	3
	II Semester	
Hard	l Core	
Sl.		
No	('Olirce	Credits
	Course ELH 451 - Analog and Digital Communication	Credits
1	ELH 451 - Analog and Digital Communication	4
1 2	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing	4 4
1 2 3	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design	4
1 2 3 Soft	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design	4 4
1 2 3 Soft (ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core	4 4 3
1 2 3 Soft (ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course	4 4
1 2 3 Soft (Sl. No.	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design	4 4 3
1 2 3 Soft (Sl. No.	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 – Computer Network	4 4 3 Credits
1 2 3 Soft (Sl. No. 1 2 3	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 - Computer Network ELS 456 - Control System	4 4 3
1 2 3 Soft (Sl. No. 1 2	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 - Computer Network ELS 456 - Control System ELS 457 - Programming with Embedded Platforms	4 4 3 Credits
1 2 3 Soft (Sl. No. 1 2 3 4	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 - Computer Network ELS 456 - Control System ELS 457 - Programming with Embedded Platforms ELS 458 - Biomedical Instrumentation	4 4 3 Credits
1 2 3 Soft (Sl. No. 1 2 3	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 - Computer Network ELS 456 - Control System ELS 457 - Programming with Embedded Platforms ELS 458 - Biomedical Instrumentation tical	4 4 3 Credits
1 2 3 Soft (Sl. No. 1 2 3 4 5 Prace	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 - Computer Network ELS 456 - Control System ELS 457 - Programming with Embedded Platforms ELS 458 - Biomedical Instrumentation	4 4 3 Credits
1 2 3 Soft o Sl. No. 1 2 3 4 5 Prace 1 2	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 - Computer Network ELS 456 - Control System ELS 457 - Programming with Embedded Platforms ELS 458 - Biomedical Instrumentation tical ELP 461 - Communication Practical ELP 462 - Digital Signal Processing Practical	4 4 3 3 Credits 3
1 2 3 Soft 6 Sl. No. 1 2 3 4 5 Pract 1 2 Oper	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 - Computer Network ELS 456 - Control System ELS 457 - Programming with Embedded Platforms ELS 458 - Biomedical Instrumentation tical ELP 461 - Communication Practical	4 4 3 3 Credits 3
1 2 3 Soft of Sl. No. 1 2 3 4 5 Pract 1 2 Oper Sl.	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 - Computer Network ELS 456 - Control System ELS 457 - Programming with Embedded Platforms ELS 458 - Biomedical Instrumentation tical ELP 461 - Communication Practical ELP 462 - Digital Signal Processing Practical	4 4 3 3 Credits 3
1 2 3 Soft of Sl. No. 1 2 3 4 5 Pract 1 2 Oper Sl.	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 - Computer Network ELS 456 - Control System ELS 457 - Programming with Embedded Platforms ELS 458 - Biomedical Instrumentation tical ELP 461 - Communication Practical ELP 462 - Digital Signal Processing Practical	4 4 3 Credits
1 2 3 Soft of Sl. No. 1 2 3 4 5 Pract 1 2 Oper Sl. No.	ELH 451 - Analog and Digital Communication ELH 452 - Digital Signal Processing ELH 453 - Basic VLSI Design Core Course ELS 454 - Embedded System Design ELS 455 - Computer Network ELS 456 - Control System ELS 457 - Programming with Embedded Platforms ELS 458 - Biomedical Instrumentation tical ELP 461 - Communication Practical ELP 462 - Digital Signal Processing Practical Elective Course	4 4 3 3 Series S

III Semester

Hard Core

Sl.			
	Course	Credits	
	ELH 501 – Digital Image Processing	4	
2	ELH 502 - Low Power VLSI Circuit Design	3	
3	ELH 503 - Wireless Communication Systems	3	
Soft	Core		
Sl.			
No.	Course	Credits	
1	ELS 504 - Nano Electronics		
2	ELS 505 - Microwave Devices and Circuits	3	
3	ELS 506 – Speech and Audio Processing	3	
4	ELS 507 – PIC Microcontroller		
5	ELS508 – ARM Processor		
6	ELS 513 - Design and Analysis of Algorithms		
Pract	tical		
1	ELP 511 - Digital Image Processing Practical	3	
2	ELP 512 - VLSI Practical using CAD Tools	3	
Oper	a Elective		
Sl.	Course	Credits	
1	ELE 509 – Consumer Electronics	3	
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IV Semester			
	Core		
Sl.			
No.	Course	Credits	
1	ELP 551 - Project	18	