



MAHATMA GANDHI UNIVERSITY, KERALA

<u>Abstract</u>

Bachelor of Science (Honours) Electronics with Computer Technology - Third Semester - Modifications to the Course Outcomes, Course Content, Mode of Assessment and Substitution of a Course - Approved - Orders Issued.

ACA 16

No. 4591/ACA 16/2025/MGU

Priyadarsini Hills, Dated: 21.05.2025

Read:-1. U.O.No.5797/AC A16/2024/MGU, dated.27.06.2024.

2. Minutes of the meeting of the Expert Committee on Electronics (UG), held on 01.05.2025.

3. Orders of the Vice Chancellor under Section 10(17), Chapter III of the Mahatma Gandhi University Act 1985, dated. 15.05.2025.

<u>ORDER</u>

The syllabi of various Honours Under Graduate Programmes coming under The MGU-UGP (Honours) Regulations, 2024, have been approved vide paper read as (1) above and published on the website of the University.

The Expert Committee on Electronics (UG), discussed the need to modify the Course Outcomes, Course Content and the Mode of Assessment of DSC, DSE and VAC type courses and also recommended to substitute the course MG3DSEECT203; Intelligent Automation, with MG3DSEECT203: AI and Machine Learning Fundamentals, **(Syllabus link- https://cap.mgu.ac.in/mguugp/ syllabus.jsp)** in the Third Semester syllabus of Bachelor of Science (Honours) Electronics with Computer Technology programme and has submitted recommendations vide paper read as (2) above.

(Recommendations are attached as Annexure)

Considering the urgency, sanction has been accorded by the Vice Chancellor, in exercise of the powers of the Academic Council vested upon him under Section 10(17), Chapter III of the Mahatma Gandhi University Act 1985, vide paper read as (3) above, to approve the said recommendations.

Hence, the Course Outcomes, Course Content and Mode of Assessment of the said courses in the Third semester syllabus of **Bachelor of Science (Honours) Electronics**

with Computer Technology programme stands modified to this extent.

Orders are issued accordingly.

MANOJ G

ASSISTANT REGISTRAR III (ACADEMIC) For REGISTRAR

Сору То

- 1. PS TO VC
- 2. PA to Registrar/CE
- 3. Convenor, Expert Committee, English (UG)
- 4. JR 2 (Admin)/DR 2, AR 3 (Academic)
- 5. JR/DR/AR (Exam)
- 6. Tabulation/Academic Sections concerned
- 7. AC C1/AC C2 Sections
- 8. IT Cell 3/OQPM1 Sections
- 9. PRO/IQAC/Records Sections
- 10. Stock File/File Copy

File No. 44583/AC A16-3 /2025/AC A16

Forwarded / By Order

Section Officer

Annexure

SEMESTER III

Course Name: Analog Electronics Course Code: MG3DSCECT200

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains (Modified)	PO No.	Page Number
1		No Change		
2		No Change	- No Change	47
3	No Change	U		
4		Α		

Course Name: Programming in C Course Code: MG3DSCECT201

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome (Modified)	Learning Domains	PO No.	Page Number
1	Understand the key concepts of programming and the basics of C Language.			
2	Understand efficient data set handling and apply functions in user program.	No Change	No Chango	50
3	No Change	No Change	No Change	50
4	Code reliable and efficient computer programs in C language.			

COURSE CONTENT Content for Classroom Transaction (Units)

Module	Units	Course Description	Hrs.	CO No. (Modified)	Page Number
	3.3	No Change	No Change	3	Γ1
3	3.4	No Change	No Change	3	51

Course Name: Indroduction to Embedded System Course Code: MG3DSEECT200

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome (Modified)	Learning Domains (Modified)	PO No.	Page Number
1		No Change		
2	No Change	K		
3			No Change	53
4	Develop efficient programs for AVR based Embedded Systems	No Change		

COURSE CONTENT Content for Classroom Transaction (Units)

Module	Units	Course Description (Modified)	Hrs.	CO No	Page Number
3	3.4	I/O programming, Introduction to interrupts, Basic Concepts of Timer/ Counter			
4		Hands on training using AVR Studio/Atmel	No Change	No Change	54
		Assembly Language Programs:			
	4.1	1. 8-bit addition, subtraction, multiplication.			

			 2. 16- bit addition, subtraction, 3. Multiplication using repeated addition 4. Number of ones in a given data 5. Check whether the number is even or odd 6. Memory swapping 7 Find the largest/smallest number from an 	No Change	No Change	54	-
			arrav	ito chunge	i to change	51	
-	Exist ing 4.3	Modi fied 4.2	Embedded C Programs: 1. LED interfacing 2. Buzzer interfacing 3. LED Chaser 4. Relay interfacing 5. LCD /Seven Segment LED interfacing				

Course Name: Microcontroller Programming Course Code: MG3DSEECT205

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains (Modified)	PO No.	Page Number
1		No Change		
2	No Change	no Change	No Change	66
3		А	No Change	00
4		А		

COURSE CONTENT Content for Classroom Transaction (Units)

Module	Units	Course Description	Hrs.	CO No (Modified)	Page Number
C	3.2	No Change	No Change	3	67
3	3.3	ino Change	no Change	3	0/

MODE OF ASSESSMENT (Modified)

A. Continuous Comprehensive Assessment					
<u>1. Theory</u> Total Marks: 25 Internal Tests, Assignments/Seminar Presentation, Viva					
2. Practical					
Total Marks: 15 Components for a	assessment: Tests/quizz	zes/assignments/Perfor	mance & Case Study.		
	B. End Semes	ter Evaluation		67	
1. <u>Written Test</u>					
Total Marks: 50		Duration: 1	Hour 30 Minutes		
А	MCQ	10 out of 10 10 x 1 = 10	10		
В	Short answer questions	4 out of 6 4 x 5 = 20	20		
С	Essay questions	2 out of 4 2 x 10 = 20	20		
2. <u>Practical Exa</u>	<u>m</u>				
Total Marks: 35		Ι	Duration: 2 Hours		
a. Viva					
b. Lab report					
c. Demonstration					

Course Name: Digital Fundamentals Course Code: MG3DSCECT204

MODE OF ASSESSMENT

Continuous Comprehensive Assessment(Modified)	Page Number
Practical	
Total Marks: 15	
 Practical assignments/Test Observation of practical skills Viva 	
End Semester Evaluation (Modified)	77
Practical	
Total Marks: 35Duration: 1½ hours	
1. Viva-7 Marks2. Demonstration-20 Marks3. Record-8 Marks	

Course Name: Green Electronics Course Code: MG3VACECT200

COURSE CONTENT Content for Classroom Transaction (Units)

Module	Units	Course Description	Hrs.	CO No (Modified)	Page Number
1	1.2			1	
1	1.3	No Change	No Change	1	84, 85
3	3.3			4	