ಸಂತಅಲೋಶಿಯಸ್ ಕಾಲೇಜು (ಸ್ವಾಯತ್ತ) ಮಂಗಳೂರು- 575 003 www.staloysius.edu.in



ST ALOYSIUS COLLEGE(AUTONOMO)

MANGALURII MANGALURU - 5751 Phone: 0824-2449700, 24497

Fax: 0824-24497 Email: principal@staloysius.ed

Re-accredited by NAAC with 'A' Grade with CGPA 3.62/4

Recognised by UGC as "College with Potential for Excellence" Conferred "College with "STAR STATUS" by DBT, Government of India. Centre for Research Capacity Building under UGC-STRIDE

Date: 17-08-2022

## NOTIFICATION

Sub: Syllabus of B.Sc. MATHEMATICS under NEP Regulations, 2021. (As per Mangalore University guidelines)

- Ref: 1. Decision of the Academic Council meeting held on 18-12-2021 vide Agenda No: 6.21(2021-22)
  - 2. Decision of the Academic Council meeting held on 09-07-2022 vide Agenda No:14
  - 3 Office Notification dated 21-02-2022.
  - 4. Office Notification dated 17-08-2022

Pursuant to the above, the Syllabus of B.Sc. MATHEMATICS under NEP Regulations, 2021 which was approved by the Academic Council at its meeting held on 18-12-2021& 09-07-2022 is hereby notified for implementation with effect from the academic year 2021-22.

To:

- 1. The Chairman/Dean/HOD. GUTOMON
- 2. The Registrar Office
- 3. Library

Board of Studies meeting held on  $20^{\text{th}}$  November 2021 chaired by Ms Priya Monteiro, Head of the Department.

#### **Members present:**

- 1. Dr Adelaide Saldanha, HOD, Department of Mathematics, St Agnes College (Autonomous), Mangaluru.
- 2. Mr Udaya K, HOD of Mathematics, St Philomena College, Puttur.
- 3. Dr John Edward Dsilva
- 4. Ms Melvita Leema Baretto
- 5. Ms Rollin Preetha Vaz
- 6. Ms Shaila Priya Rodrigues

### **Programme Outcomes (PO):**

By the end of the program it is expected that the students will be benefited by the following:

PO 1	<b>Disciplinary Knowledge</b> : Bachelor degree in Mathematics is the culmination
	of in-depth knowledge of Algebra, Calculus, Geometry, differential equations
	and several other branches of pure and applied mathematics. This also leads to
	study the related areas such as computer science and other allied subjects
PO 2	Communication Skills: Ability to communicate various mathematical
	concepts effectively using examples and their geometrical visualization. The
	skills and knowledge gained in this program will lead to the proficiency in
	analytical reasoning which can be used for modeling and solving of real life
	problems.
PO 3	Critical thinking and analytical reasoning: The students undergoing the
	programme acquire ability of critical thinking and logical reasoning and
	capability of recognizing and distinguishing the various aspects of real life
	problems.
PO 4	Problem Solving: The Mathematical knowledge gained by the students
	through the programme develop an ability to analyze the problems, identify
	and define appropriate computing requirements for its solutions. This

Assessment
Weightage for the Assessments (in percentage)

Type of Course	Formative Assessment/	Summative Assessment				
	I.A.	(S.A.)				
Theory	40%	60 %				
Practical	50%	50 %				
Projects	40%	60 %				
Experiential Learning (Internship etc.)						

# **Structure under NEP**

Course Code	Title of course	Category of course			CIE	Total Marks	Credits	
			week					
	SI	EMESTER I	l		1		l .	
G 503 DC1.1	Number Theory - I, Algebra - I and Calculus - I	DSC	4	60	40	100	4	
G 503 DC2.1P Theory based practicals on  Number Theory – I, Algebra -  I and Calculus - I		DSC	4	25	25	50	2	
G 503 OE1.1	Mathematics - I	OEC	3	60	40	100	3	
Total credit							9	
SEMESTER II		<u> </u>	L				<u> </u>	
G 503 DC1.2	Number Theory - II, Algebra - II and Calculus - II	DSC	4	60	40	100	4	
G 503 DC2.2P	Theory based practicals on Number Theory – II, Algebra - II and Calculus - II	DSC	4	25	25	50	2	
G 503 OE1.2	Mathematics - II	OEC	3	60	40	100	3	
Total credit							9	



# St Aloysius College (Autonomous) Mangaluru

Re-accredited by NAAC "A" Grade

Course structure and syllabus of

B.Sc.

ELECTRONICS

Under NEP Regulations, 2021 (2021-22 Batch Onwards)



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Date: 17-08-2022

#### **NOTIFICATION**

Sub: Syllabus of **B.Sc. ELECTRONICS** under NEP Regulations, 2021. (As per Mangalore University guidelines)

- Ref: 1. Decision of the Academic Council meeting held on 09-07-2022 vide Agenda No: 14 (2022-23)
  - 2. Office Notification dated 17-08-2022

Pursuant to the above, the Syllabus of **B.Sc. ELECTRONICS** under NEP Regulations, 2021 which was approved by the Academic Council at its meeting held on 09-07-2022 is hereby notified for implementation with effect from the academic year **2022-23**.

**PRINCIPAL** 



REGISTRAR

To:

- 1. The Chairman/Dean/HOD.
- 2. The Registrar Office
- 3. Library

No.	ester	Title of thePaper	lours	Hour s /wee k		Marks /Paper				Duration of Exam (hours)		paper	edits	edits
Sl. No. Semester			Teaching Hours	Teaching H	Practical	Exam	Y Y	Pract	ical ≰	Theory	Practical	Total Marks / paper	Theory Credits	Practical Credits
1	I	ELE-CT1: G 504 DC1.1 FUNDAMENTALS OF ANALOG AND DIGITAL	60	4	4	60	40	25	25	2.5	4	100+50	4	2
		ELE-OE 1.1 Basics of Electronic circuits and PCB Design	36	2	1	40	10	-	-	2	-	50	2	1
2		ELE-CT2: G 504 DC1.2  Discrete amplifiers, Operational  amplifiers, Combinational circuits and  Sequential Circuits	60	4	4	60	40	25	25	2.5	4	100+50	4	2
		ELE-OE 2.1: Renewable Energy and Energy harvesting	36	2	1	40	10	-	-	2*	-	50	2	1
3	III	ELE-CT3: G 504 DC1.3 Power control, Oscillators, wave shaping circuits, Principles of Radio Communication and Digital circuits ELE-OE3.1: Domestic Equipment	60	4	4		40	25	25	2.5	4	100+50		2
4	IV	Maintenance  ELE-CT4: G 504 DC1.4  Power control, Oscillators, wave shaping circuits, Principles of Radio Communication and Digital circuits	60	4	4	6 0	10 4 0	2 5	2 5	2.5	4	50 100+ 50	4	2
5	V		60	4	4	60	40	2	2	2.5	4	100+ 50	4	2
			60	4	4	60	40	2	2	2.5	4	100+ 50	4	2

Semester	Code	Paper Title						
I	G 504DC1.1	Fundamentals of analog and digital						
	G 504DC2.1P	Practicals - I						
	G 5040E1.1	Basics of Electronic circuits and PCB design						
II	G 504DC1.2	Discrete amplifiers, Operational amplifiers, Combinational circuits and Sequential						
		Circuits						
	G 504DC2.2P	Practicals - II						
	G 5040E1.2	Renewable Energy and Energy harvesting						
III	G 504DC1.3	Power control , Oscillators, waves shaping circuits, Principles of Radio						
		Communication and Digital circuits						
	G 504DC2.3P	Practicals - III						
	G 5040E1.3	ELE-0E3.1: Domestic Equipment Maintenance						
IV	G 504DC1.4							
	G 504DC2.4P	Practicals - IV						
V	G 504DC1.5	Power control, Oscillators, waves shaping circuits, Principles of Radio						
		Communication and Digital circuits						
	G 504DC2.5P	Practicals -						
	G 504DC16.4	Power control , Oscillators, waves shaping circuits, Principles of Radio						
		Communication and Digital circuits						
	G 504DC2.4P	Practicals - VI						