



**Kalasalingam Academy of Research and Education**  
 (Deemed to be University)  
 Under Sec. 3 of UGC Act 1956  
 Anand Nagar, Krishnankoil (Via)  
 Virudhunagar (Dt), Tamil Nadu, India – 626 126

### ECE101 SAMPLE COURSE

ECE101 Sample Course	L	T	P	X	C
	3	1	0	0	4
Pre-requisite: Course Code of Sample Pre-requisite Course Code of Sample Pre-requisite	Course Category / Type: PM/TC				

#### Course Description

This course introduces fundamental circuit analysis methods for linear networks.

#### Course Objectives

- Develop the ability to model simple electrical networks using ideal elements.
- Apply systematic methods to solve DC and AC linear circuits.
- Interpret circuit behaviour using standard engineering metrics.
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- Apply systematic methods to solve DC and AC linear circuits.
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#### Course Outcomes

CO1: Analyse linear circuits using nodal and mesh methods.

CO2: Determine steady-state AC responses using phasor techniques.

CO3: Evaluate power in AC circuits using appropriate quantities.

#### Articulation Matrix CO to PO, PSO

CO	PO											PSO		
	1	2	3	4	5	6	7	8	9	10	11	1	2	3
CO1	3	2	1	1	-	-	-	-	-	-	-	2	1	1
CO2	2	3	2	1	-	-	-	2	1	1	-	-	-	-
CO3	1	2	3	2	1	-	-	-	-	-	2	1	1	-

#### Articulation Matrix CO to SO, PSO

CO	SO							PSO		
	1	2	3	4	5	6	7	1	2	3
CO1	3	2	1	1	-	-	-	2	1	1
CO2	2	3	2	1	-	2	1	1	-	-
CO3	1	2	3	2	1	-	-	1	1	-

#### Textbooks

1. Sedra, A. S., and Smith, K. C., *Microelectronic Circuits*, 7th ed., Oxford University Press, 2016.
2. Boylestad, R. L., and Nashelsky, L., *Electronic Devices and Circuit Theory*, 11th ed., Pearson, 2013.



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## References

1. Millman, J., and Halkias, C., *Integrated Electronics*, McGraw-Hill, 1972.
2. IEEE Std 315-1975, Graphic Symbols for Electrical and Electronics Diagrams.



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## ECE102 COURSE CODE OF SAMPLE NEW COURSES

ECE102 Course Code of Sample New Courses	L	T	P	X	C
	3	1	0	0	4
<b>Pre-requisite:</b> Course Code of Sample Pre-requisite	<b>Course Category / Type:</b> PE/TC				

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### Course Objectives

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- Apply systematic methods to solve DC and AC linear circuits.
- Interpret circuit behaviour using standard engineering metrics.

### Course Outcomes

CO1: Analyse linear circuits using nodal and mesh methods.

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CO3: Evaluate power in AC circuits using appropriate quantities.

### Articulation Matrix CO to PO, PSO

CO	PO											PSO		
	1	2	3	4	5	6	7	8	9	10	11	1	2	3
CO1	3	2	1	1	-	-	2	1	1	-	-	-	-	-
CO2	2	3	2	1	-	-	-	-	2	1	1	-	-	-
CO3	1	2	3	2	1	2	1	1	-	-	-	-	-	-

### Articulation Matrix CO to SO, PSO

CO	SO							PSO		
	1	2	3	4	5	6	7	1	2	3
CO1	3	2	1	1	-	-	-	2	1	1
CO2	2	3	2	1	-	2	1	1	-	-
CO3	1	2	3	2	1	-	-	1	1	-

### Textbooks

1. Sedra, A. S., and Smith, K. C., *Microelectronic Circuits*, 7th ed., Oxford University Press, 2016.
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