Faculty Name	S.Thirunavukkarasu	Designation	Assistant Professor / EEE
Subject Name	Linear Integrated Circuits And Applications	Sub Code	EE6303
Year	II	Semester	III
Degree	B.E	Branch	EEE

UNIT – I IC FABRICATION						
S.No	Date Planned	Topic to be Covered	Time Required (Period)	Teaching Methods	Teaching Aids	Books/ Journals Reffered
1	22.6.15	IC classification	1	L	CB	B
2	23.6.15	Fundamental of monolithic IC technology	1	L	CB	B
3	23.6.15	Epitaxial growth masking and etching	1	L	CB	B
4	24.6.15	Diffusion of impurities	1	L	CB	B
5	26.6.15	Realisation of monolithic ICs and packaging	1	L	CB	B
6	27.6.15	Fabrication of diodes	2	L	CB	B
7	30.6.15	Fabrication of capacitance	2	L	CB	B
8	1.7.15, 3.7.15	Fabrication of resistance	2	L	CB	B
9	4.7.15	Fabrication of FETs	1	L	CB	B

UNIT – II CHARACTERISTICS OF OPAMP						
S.No	Date Planed	Topics to be covered	Time required (periods)	Teaching Methods	Teaching Aids	Books/ Journals Referred
1	4.7.15	Ideal OP-AMP characteristics	1	L	CB	B
2	7.7.15	DC characteristics	2	L	CB	B
3	8.7.15, 10.7.15	AC characteristics	2	L	CB	B
4	11.7.15	Differential amplifier	1	L	CB	B
5	11.7.15, 14.7.15	Frequency response of OP-AMP	2	L	CB	B
6	14.7.15, 17.7.15	Basic applications of op-amp – Inverting and Non-inverting Amplifiers	2	L	CB	B

7	20.7.15	V/I & I/V converters	1	L	CB	B
8	21.7.15	Summer,	1	L	CB	B
9	21.7.15	Differentiator and integrator	1	L	CB	B
UNIT – III APPLICATIONS OF OPAMP						
S.No	Date Planed	Topics to be covered	Time required (periods)	Teaching Methods	Teaching Aids	Books/ Journals Referred
1	24.7.15	Instrumentation amplifier	1	L	CB	B
2	25.7.15	Log and Antilog Amplifiers	1	L	CB	B
3	25.7.15, 28.7.15	first and second order active filters	2	L	CB	B
4	28.7.15	Comparators	1	L	CB	B
5	29.7.15, 31.7.15	Multivibrators	2	L	CB	B
6	1.8.15	Waveform generators,	2	L	CB	B
7	4.8.15	Clippers, Clampers,	1	L	CB	B
8	4.8.15	Peak detector	1	L	CB	B
9	5.8.15	S/H circuit, D/A converter (R- 2R ladder and weighted resistor types),	1	L	CB	B
10	7.8.15	A/D converters using opamps	1	L	CB	B
UNIT – IV SPECIAL ICs						
S.No	Date Planed	Topics to be covered	Time required (periods)	Teaching Methods	Teaching Aids	Books/ Journals Referred
1	8.8.15	Functional block	1	L	CB	B
2	8.8.15, 11.8.15	Characteristics & application circuits with 555 Timer	2	L	CB	B
3	11.8.15, 14.8.15	IC-566 voltage controlled oscillator Ic	3	L	CB	B
4	18.8.15	565-phase lock loop Ic	2	L	CB	B

5	19.8.15, 21.8.15	Analog multiplier ICs	2	L	CB	B
UNIT – V APPLICATION ICs						
S.No	Date Planed	Topics to be covered	Time required (periods)	Teaching Methods	Teaching Aids	Books/ Journals Referred
1	22.8.15	IC voltage regulators	2	L	CB	B
2	25.8.15	LM78XX,79XX Fixed voltage regulators	2	L	CB	B
3	26.8.15, 28.8.15	LM317, 723 Variable voltage regulators,	2	L	CB	B
4	29.8.15	Switching Regulator	1	L	CB	B
5	29.8.15	SMPS	1	L	CB	B
6	1.9.15	LM 380 power amplifier	1	L	CB	B
7	1.9.15	ICL 8038 function generator IC	1	L	CB	B

Teaching Methods: Lecture (L), Group Discussion (GD), Quiz (Q), Seminar(S), Team Teaching (TT), Lab Visit (LV), Industrial Visit (IV)

Teaching Aids: Video Film (VF), Power Point Presentation (PP), Demo (D), Models (M) , Over Head Project (OHP), Chalk Board (CB).

TEXT BOOKS:

A. David A.Bell, 'Op-amp & Linear ICs', Oxford, 2013.

B. D.Roy Choudhary, Sheil B.Jani, 'Linear Integrated Circuits', II edition, New Age, 2003.

C. Ramakant A.Gayakward, 'Op-amps and Linear Integrated Circuits', IV edition, Pearson Education, 2003 / PHI. 2000.

REFERENCES:

D. Fiore,"Opamps & Linear Integrated Circuits Concepts & Applications", Cengage, 2010.

E. Floyd, Buchla,"Fundamentals of Analog Circuits, Pearson, 2013.

F. Jacob Millman, Christos C.Halkias, 'Integrated Electronics - Analog and Digital circuits system',Tata McGraw Hill, 2003.

G. Robert F.Coughlin, Fredrick F. Driscoll, ‘Op-amp and Line