

## Semester V

SLOT	COURSE NO.	COURSES	L-T-P	HOURS	CREDIT
A	ECT 301	LINEAR INTEGRATED CIRCUITS	3-1-0	4	4
B	ECT 303	DIGITAL SIGNAL PROCESSING	3-1-0	4	4
C	ECT 305	ANALOG AND DIGITAL COMMUNICATION	3-1-0	4	4
D	ECT 307	CONTROL SYSTEMS	3-1-0	4	4
E 1/2	HUT300	INDUSTRIAL ECONOMICS AND FOREIGN TRADE	3-0-0	3	3
	HUT310	MANAGEMENT FOR ENGINEERS	3-0-0	3	3
F	MCN301	DISASTER MANAGEMENT	2-0-0	2	--
S	ECL 331	ANALOG INTEGRATED CIRCUITS AND SIMULATION LAB	0-0-3	3	2
T	ECL 333	DIGITAL SIGNAL PROCESSING LAB	0-0-3	3	2
R/M/H	VAC	Remedial/Minor/Honours course	3-1-0	4**	4
TOTAL				<b>27/31</b>	<b>23/27</b>

### NOTE:

1. Industrial Economics & Foreign Trade and Management for Engineers shall be offered in both S5 and S6. Institutions can advise students belonging to about 50% of the number of branches in the Institution to opt for Industrial Economics & Foreign Trade in S5 and Management for Engineers in S6 and vice versa.
2. \*All Institutions should keep 4 hours exclusively for Remedial class/Minor/Honours course (Tuesdays from 3 to 5 PM and Wednesdays from 3 to 5 PM). If a student does not opt for minor/honours programme, he/she can be given remedial class.

## Semester VI

SLOT	COURSE NO.	COURSES	L-T-P	HOURS	CREDIT
A	ECT 302	ELECTROMAGNETICS	3-1-0	4	4
B	ECT 304	VLSI CIRCUIT DESIGN	3-1-0	4	4
C	ECT 306	INFORMATION THEORY AND CODING	3-1-0	4	4
D	ECTXXX	PROGRAM ELECTIVE I	2-1-0	3	3
E ½	HUT300	INDUSTRIAL ECONOMICS AND FOREIGN TRADE	3-0-0	3	3
	HUT310	MANAGEMENT FOR ENGINEERS	3-0-0	3	3
F	ECT 308	COMPREHENSIVE COURSE WORK	1-0-0	1	1
S	ECL 332	COMMUNICATION LAB	0-0-3	3	2
T	ECD 334	MINIPROJECT	0-0-3	3	2
R/M/H	VAC	Remedial/Minor/Honours course	3-1-0	4**	4
TOTAL				25/29	23/27

### PROGRAM ELECTIVE I

SLOT	COURSE NO.	COURSES	L-T-P	HOURS	CREDIT
D	ECT 312	Digital System Design	2-1-0	3	3
	ECT 322	Power Electronics	2-1-0		
	ECT 332	Data Analysis	2-1-0		
	ECT 342	Embedded Systems	2-1-0		
	ECT 352	Digital Image Processing	2-1-0		
	ECT 362	Introduction to MEMS	2-1-0		
	ECT 372	Quantum Computing	2-1-0		

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2. \*All Institutions should keep 4 hours exclusively for Remedial class/Minor/Honours course (Tuesdays from 3 to 5 PM and Wednesdays from 2 to 4 PM). If a student does not opt for minor/honours programme, he/she can be given remedial class.
3. **Comprehensive Course Work:** The comprehensive course work in the sixth semester of study shall have a written test of 50 marks. The written examination will be of objective type similar to the GATE examination and will be conducted by the University. **Syllabus for comprehensive examination shall be prepared by the respective BoS choosing any 5 core courses studied from semester 3 to 5.** The pass minimum for this course is 25. The course should be mapped with a faculty and classes shall be arranged for practising questions based on the core courses listed in the curriculum.
4. **Mini project:** It is introduced in sixth semester with a specific objective to strengthen the understanding of student's fundamentals through application of theoretical concepts. Mini project can help to boost their skills and widen the horizon of their thinking. The ultimate aim of an engineering student is to resolve a problem by applying theoretical knowledge. Doing more projects increases problem-solving skills. Students should identify a topic of interest in consultation with Faculty/Advisor. Review the literature and gather information pertaining to the chosen topic. State the objectives and develop a methodology to achieve the objectives. Carryout the design/fabrication or develop codes/programs to achieve the objectives. Demonstrate the novelty of the project through the results and outputs. The progress of the mini project is evaluated based on a minimum of two reviews. The review committee may be constituted by the Head of the Department. A project report is required at the end of the semester. The product has to be demonstrated for its full design specifications. Innovative design concepts, reliability considerations, aesthetics/ergonomic aspects taken care of in the project shall be given due weight. The internal evaluation will be made based on the product, the report and a viva- voce examination, conducted by a 3 member committee appointed by Head of the Department comprising HoD or a senior faculty member, Academic coordinator for that program, project guide/coordinator.

Total marks: 150, CIE 75 marks and ESE 75 marks

Split up for CIE

Attendance : 10

Guide : 15

Project Report : 10

Evaluation by the Committee (will be evaluating the level of completion and demonstration of functionality/specifications, presentation, oral examination, work knowledge and involvement)

: 40