



ST JOSEPH ENGINEERING COLLEGE, VAMANJOOR, MANGALURU-575028

An Autonomous Institution

Affiliated to VTU Belagavi, Recognised by AICTE New Delhi, Accredited by NAAC with A+ Grade

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Accredited by NBA New Delhi

TESSOLVE LABORATORY

Tessolve laboratory syllabus

Each class of 3 hrs

Total hrs: 120

Sl.No.	Class	Content
1.	Class 1	Material, Types of materials and difference
2.	Class 2	P-N junction diode , V-I characteristics
3.	Class 3	Difference between diode and transistor
4.	Class 4	Introduction to Op-Amp
5.	Class 5	Inverting amplifier
6.	Class 6	Non-Inverting amplifier
7.	Class 7	Comparator, Level shifter
8.	Class 8	Summer, Voltage follower
9.	Class 9	Integrator
10.	Class 10	Differentiator using op-amps
11.	Class 11	Resolution and Accuracy,
12.	Class 12	Forcing current and voltage
13.	Class 13	LDO regulator
14.	Class 14	Line regulation test
15.	Class 15	Load regulation
16.	Class 16	Generic details about IC
17.	Class 17	Basic of digital
18.	Class 18	Understanding of data sheet
19.	Class 19	Test plan
20.	Class 20	Leakage test
21.	Class 21	Product life cycle
22.	Class 22	Power supply details
23.	Class 23	Digital design
24.	Class 24	Transistor switch circuit to switch ON/OFF an LED
25.	Class 25	Voltage series feedback



ST JOSEPH ENGINEERING COLLEGE, VAMANJOOR, MANGALURU-575028

An Autonomous Institution

Affiliated to VTU Belagavi, Recognised by AICTE New Delhi, Accredited by NAAC with A+ Grade

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Accredited by NBA New Delhi

26.	Class 26	Feedback Amplifiers
27.	Class 27	Principle and types
28.	Class 28	Two-transistor model
29.	Class 29	Switching action
30.	Class 30	Transistor switch circuit to operate relay
31.	Class 31	Design a power supply
32.	Class 32	Design a power supply
33.	Class 33	Digital Design experiments
34.	Class 34	Expt. Simple circuits of use of diode
35.	Class 35	Expt. Simple circuits of use of transistor
36.	Class 36	Expt. Op-amp applications
37.	Class 37	Expt. Op-amp applications
38.	Class 38	Expt. on Voltage source
39.	Class 39	Expt. on current source
40.	Class 40	Expt. on feedback

Co-ordinator
Dr Rohan Pinto

INTERNSHIP / PROFESSIONAL PRACTISE
[As per Choice Based Credit System (CBCS) scheme]
(Effective from the academic year 2017 -2018)
SEMESTER – VIII

Subject Code	17CS84	IA Marks	50
Duration	4 weeks	Exam Marks	50
		Exam Hours	03

CREDITS – 02

Description (If any):

With reference to the above subject, this is to inform that the following are the guidelines to be followed for the Internship Programme and the earlier circular as cited in ref (i) is hereby withdrawn:

1) As per the 15OB.9 the Internship Programme duration is of Eight weeks. However it has been reduced to Four weeks and it should be carried out between (VI and VII Semester) Vacation and/or (VII and VIII Semester) Vacation.

2) The internship can be carried out in any Industry/R and D Organization/Research Institute/ Educational institute of repute.

3) The Institutions may also suggest the students to enrol for the Internshala platform for free internships as there is a MoU with the AICTE for the beneficial of the affiliated Institutions (<https://internshala.com/>)

4) The Examination of Internship will be carried out in line with the University Project Viva-voce examination.

5) (a) The Department/college shall nominate staff member/s to facilitate, guide and supervise students under internship. (b) The Internal Guide has to visit place of internship at least once during the student's internship.

6) The students shall report the progress of the internship to the guide in regular intervals and seek his/her advice.

7) After the completion of Internship, students shall submit a report with completion and attendance certificates to the Head of the Department with the approval of both internal and external guides.

8) The Examination of Internship will be carried out in line with the University Project Viva-voce examination.

9) There will be 50 marks for CIE (Seminar: 25, Internship report: 25) and 50 marks for Viva – Voce conducted during SEE. The minimum requirement of CIE marks shall be 50% of the maximum marks.

10) The internal guide shall award the marks for seminar and internship report after evaluation. He/she will also be the internal examiner for Viva – Voce conducted during SEE.

11) The external guide from the industry shall be an examiner for the viva voce on Internship. Viva-Voce on internship shall be conducted at the college and the date of Viva-Voce shall be fixed in consultation with the external Guide. The Examiners shall jointly award the Viva - Voce marks.

12) In case the external Guide expresses his inability to conduct viva voce, the Chief Superintendent of the institution shall appoint a senior faculty of the Department to conduct viva-voce along with the internal guide. The same shall be informed in writing to the concerned Chairperson, Board of Examiners (BOE).

13) The students are permitted to carry out the internship anywhere in India or abroad. The University will not provide any kind of financial assistance to any student for carrying out the Internship.

Course outcomes: The students should be able to:

1. Adapt easily to the industry environment
2. Take part in team work
3. Make use of modern tools
4. Decide upon project planning and financing.
5. Adapt ethical values.
6. Motivate for lifelong learning

University Updates

PROJECT WORK PHASE II [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018) SEMESTER – VIII			
Subject Code	17CSP85	IA Marks	100
Number of Lecture Hours/Week	06	Exam Marks	100
Total Number of Lecture Hours	--	Exam Hours	03
CREDITS – 06			
Description (If any):			
<ul style="list-style-type: none"> • Project: Carried out at the Institution or at an Industry. • Project work shall preferably be batch wise, the strength of each batch shall not exceed maximum of four students • Viva-voce examination in project work shall be conducted batch-wise. • For Project Phase –I and Project seminar and Project Phase –II, the CIE shall be 100 respectively. • The CIE marks in the case of projects in the final year shall be based on the evaluation at the end of VIII semester by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the project guide. • Minimum requirement of CIE marks for Project work shall be 50% of the maximum marks. • Students failing to secure a minimum of 50% of the CIE marks in Project work shall not be eligible for the Project examination conducted by the University and they shall be considered as failed in that/those Course/s. However, they can appear for University examinations conducted in other Courses of the same semester and backlog Courses if any. Students after satisfying the prescribed minimum CIE marks in the Course/s when offered during subsequent semester shall appear for SEE. • Improvement of CIE marks shall not be allowed in Project where the student has already secured the minimum required marks • For a pass in a Project/Viva-voce examination, a student shall secure a minimum of 40% of the maximum marks prescribed for the University Examination. The Minimum Passing Grade in a Course is ‘E’. • The student who desires to reject the results of a semester shall reject performance in all the Courses of the semester, irrespective of whether the student has passed or failed in any Course. However, the rejection of performance of VIII semester project shall not be permitted 			
Course outcomes: The students should be able to:			
<ol style="list-style-type: none"> 1. Identify a issue and derive problem related to society, environment, economics, energy and technology 2. Formulate and Analyze the problem and determine the scope of the solution chosen 3. Determine , dissect, and estimate the parameters, required in the solution. 4. Evaluate the solution by considering the standard data / Objective function and by using appropriate performance metrics. 5. Compile the report and take part in present / publishing the finding in a reputed conference / publications 6. Attempt to obtain ownership of the solution / product developed. 			