**SSN COLLEGE OF ENGINEERING, KALAVAKKAM – 603 110**
**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**VI SEMESTER – CSE 'A' & 'B' SECTION**
**CS6660 – COMPILER DESIGN**
**COURSE ASSESSMENT PLAN**

**ACADEMIC YEAR: 2017-2018 (Even)** **BATCH: 2015-2019**

## COURSE OBJECTIVES

**The student should be made to:**

- Learn the design different phases of a Compiler.
- Learn the various parsing techniques and different levels of translation
- Learn how to optimize and effectively generate machine codes

## COURSE OUTCOMES

**At the end of the course, the student should be able to:**

1. Understand the different phases of compiler. (K2)
2. Design a lexical analyzer for a sample language. (K3)
3. Apply different parsing algorithm to develop the parsers for the given grammar.(K3)
4. Acquire the knowledge about syntax directed translation and run time environment. (K2)
5. Learn code optimization techniques and design a simple code generator. (K3)

**Blooms Taxonomy**

| Remember | Understand | Apply | Analyze | Evaluate | Create |
|---|---|---|---|---|---|
| K1 | K2 | K3 | K4 | K5 | K6 |

1. Engineering knowledge: Our graduates will have the knowledge of mathematics, logic, probability and statistics, computer science and engineering, and the skill to apply them in the fields of computer software and hardware. (**K3)**
2. Problem analysis: Our graduates will have the knowledge and skill to identify, formulate, and solve hardware and software problems using sound computer science principles. ( **K4)**
3. Experimentation: Our graduates will have the skill to design and conduct experiments, organize, analyze, and interpret data. **( K5)**
4. Design and development: Our graduates will have the skill to design and construct hardware and software systems, components, or processes as per needs and specifications. **(K4)**
5. Team work: Our graduates will have the interpersonal and communication skills to function as team players on multidisciplinary teams. -

6. Modern tools usage: Our graduates will be able to use the techniques, skills, and modern hardware and software tools necessary for computer engineering practice. **( K3)**
7. Social and environmental responsibility: Our graduates will demonstrate knowledge related to social, ethical, legal, economical, health and safety, sustainability and environmental dimensions.
8. Communication skills: Our graduates will be able to effectively communicate technical information in speech, presentation, and in writing.
9. Contemporariness: Our graduates will have knowledge of contemporary issues in the practice of their profession.
10. Self-learning: Our graduates will develop confidence for self learning and ability for life-long learning.
11. Competitive exam preparedness: Our graduates will participate and succeed in competitive examinations such as GATE, IES, GRE.
12. Leadership: Our graduates are trained to enhance their managerial skills, leadership quality and entrepreneurial spirit.

**Description of Assessment Tools**

*Exams*: Three Unit Assessment Tests during the term and Final University exam.

**COURSE ASSESSMENT MATRIX**

| | **Outcome** | | | | |
|---|---|---|---|---|---|
| | **1** | **2** | **3** | **4** | **5** |
| *Assessment 1* | X | X | | | |
| *Assessment 2* | | | X | | |
| *Assessment 3* | | | X | X | X |

| | | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | K3 | K4 | K5 | K4 | - | K3 | - | - | - | - | - | - |
| CO1 | K2 | 3 | 2 | 1 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| CO2 | K3 | 3 | 3 | 2 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| CO3 | K3 | 3 | 3 | 2 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| CO4 | K2 | 3 | 2 | 1 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| CO5 | K3 | 3 | 3 | 2 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |

**3: Strong 2: Significant 3: Reasonable**

**FACULTY INCHARGE VERIFIED BY HOD-CSE**

**[Dr. B. PRABAVATHY & Dr. B. BHARATHI] PAC MEMBER [Dr. CHITRA BABU]**