

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

भारतीय प्रौद्योगिकी संस्थान तिरुपति

Yerpedu-Venkatagiri Road, Yerpedu Post, Tirupati District, Andhra Pradesh - 517 619

1.	Title of the course	Compiler Design Laboratory
2.	Course number	CS313P
3.	Structure of credits (L-T-P-C)	0-0-3-2
4.	New course/modification to	Modified with CS301P/COMPILER DESIGN LABORATORY
5.	To be offered by	Computer Science and Engineering
6.	Proposed by	Badarla Venkata Ramana
7.	Prerequisite	CS301L/COMPILER DESIGN
8.	Course Objective(s): To design and develop language translators using appropriate tools and techniques.	
9.	Course Content: Designing a compiler for a programming language with fundamental constructs such as variable declaration, basic syntax, data types and structures, selection statements and control transfer statements. Implementation of the aforementioned using tools such as lex/flex and yacc; Validation of the correctness of the compiler developed; Development of language reference manual and language developers document.	
10.	Textbook(s): 1. Holub A I, Compiler Design in C, Pearson (2015). 2. Levine J, Mason T and Brown D, Lex & Yacc: Text Processing Tools, Oreilly (2014).	
11.	Reference(s): 1. Donnelly C and Stallman R, Bison: The Yacc-compatible Parser Generator, Samurai Media Limited (2015). 2. verBurg C L, Effective Flex & Bison, CreateSpace Independent Publishing Platform (2018).	