

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI
PROFORMA FOR NEW COURSE

1.	Title of the Course	Compiler Design Laboratory
2.	Course Number	CS3191
3.	Status of the Course	Core
4.	Structure of Credits	0-0-3-2
5.	Offered To	UG
6.	New Course/Modification to	New
7.	To be Offered by	Department of Computer Science and Engineering
8.	To take effect from	July 2018
9.	Prerequisite	Nil
10.	Whether approved by the Department	Yes
11.	Course Objective: To gain hands-on experience on the tools and techniques for implementing language translators; To understand a broad class of translation problems.	
12.	Course Content: A language subset will be defined and used during the lab course; The programming exercises here consist of implementing the basic components of a compiler for a toy language, which is a subset of the languages such as C, Java, using LEX/JFLEX and YACC tools; The constructs in this subset are found in most programming languages; Further the course contains exercises on translating documents in different formats such as html2txt, latex2html.	
13.	Text book(s): 1. Holub A I, <i>Compiler Design in C</i> , Person Publisher (2015). 2. Levine J, Mason T and Brown D, <i>Lex & Yacc: Text Processing Tools</i> , Oreilly (2014).	
14.	Reference(s): 1. Donnelly C and Stallman R, <i>Bison: The Yacc-compatible Parser Generator</i> , Samurai Media Limited (2015). 2. verBurg C L, <i>Effective Flex & Bison</i> , CreateSpace Independent Publishing Platform (2018).	