

**INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI**  
**PROFORMA FOR MODIFIED COURSE**

1.	Title of the Course	Artificial Intelligence
2.	Course Number	CS3800
3.	Status of the Course	Core
4.	Structure of Credits	3-0-0-3
5.	Offered To	UG
6.	New Course/Modification to	Modification to CS3800
7.	To be Offered by	Department of Computer Science & Engineering
8.	To take effect from	January 2019
9.	Prerequisite	Nil
10.	Whether approved by the Department	Yes
11.	<b>Course Objective:</b> To impart theoretical understanding of - AI formalism and problem formulation. To impart overall understanding of the current trends and research future research directions.	
12.	<b>Course Content:</b> Artificial Intelligence concepts including – State space representation and search; Knowledge representation and reasoning; Formal logic and unification algorithms; Planning algorithms, Constraint satisfaction; Case based reasoning; Frequent Pattern Mining. Current trends and future directions – including NLP and question-answering systems.	
13.	Text book(s): 1. Stuart J. Russell, Peter Norvig, <i>Artificial Intelligence: A Modern Approach</i> , Pearson, (2015). 2. Christopher Bishop, <i>Pattern Recognition and Machine Learning</i> , Springer, (2006).	
14.	Reference(s): 1. Richard O. Duda, Peter E. Hart, <i>Pattern Classification</i> , Wiley, (2012). 2. Deepak Khemani, <i>A First Course in Artificial Intelligence</i> , McGrawHill, (2015). 3. Tom M. Mitchell, <i>Machine Learning</i> , McGrawHill, (1997).	