

COURSE TITLE	INDUSTRIAL INTERNET OF THING
COURSE CODE	01CA1122
COURSE CREDITS	3

Objective:

- 1 The course is prepared to provide the detailed understating of IoT in manufacturing

Course Outcomes: After completion of this course, student will be able to:

- 1 Apply IoT concepts to design a system integrating sensors and cloud infrastructure.
- 2 Implement machine-to-machine (M2M) communication protocols in a functional prototype.
- 3 Analyze the performance and suitability of different sensors used in electromechanical systems.
- 4 Analyze data models and storage mechanisms for distributed applications.
- 5 Evaluate IoT architectures, protocols, and data management techniques for optimal solutions.

Pre-requisite of course:N.A.

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
3	0	0	50	30	20	0	0
Contents : Unit	Topics						Contact Hours
Total Hours							

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
Total Hours		

Textbook :

- 1 INTERNET OF THINGS, Vasudevan, Shriram K. | Nagarajan, Abhishek S. | Sundaram, RMD, WILEY, 2010

References:

- 1 Internet of Things, A hands-on approach, Internet of Things, A hands-on approach, Bahga and V. Madiseti, Create Space Independent Publishing Platform, 2014

References:

- 2 Cloud Computing, A hands-on approach, Cloud Computing, A hands-on approach, Bahga and V. Madiseti, Create Space Independent Publishing Platform, 2013
- 3 M2M communications: A systems approach, M2M communications: A systems approach, D. Boswarthick, O. Elloumi, and O. Hersent, Wiley, 2012
- 4 Introduction to Mechatronic Design, Introduction to Mechatronic Design, J. Edward Carryer, et al., Prentice Hall, 2010
- 5 Management Information Systems, Management Information Systems, K. Laudon and J. Laudon, Pearson Higher Education, 2016

Suggested Theory Distribution:

The suggested theory distribution as per Bloom’s taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
15.00	20.00	20.00	20.00	15.00	10.00

Instructional Method:

- 1 STUDENTS WILL HAVE TO SUBMIT ASSIGNMENTS AS A PART OF CSE COMPONENT.

Supplementary Resources:

- 1 nptel.ac.in