Tentative Course Outline

Short Term Course on

"5G and Beyond in Manufacturing Industries"

(June 26- July 1, 2020)

Course Coordinator: Prof. Sudip Misra, CSE, IIT Kharagpur

Lecture No.	Lecture Topic
1	Evolution of Manufacturing and Industry 4.0
2	Classical AI Methods and Applications in Manufacturing
3	Sensors and Signal Processing and Applications in Manufacturing
4	5G Technology
5	Machine Vision and Application in Manufacturing
6	Sensor Network
7	IoT Devices and Applications in Manufacturing
8	5G Demonstration
9	IoT Demonstration
10	Edge & Cloud Computing
11	Machine and Deep learning Methods and Some Case Studies in Manufacturing
12	Big Data in Manufacturing
13	Demonstration: Big data
14	Brain Science and BCI Applications in Manufacturing with Case Studies
15	Digital twin and its application in manufacturing, with a demonstration
16	Blockchain