

Course: Introduction to Robotics

Course Code: noc21-me32

Session: 2020-21

Duration: 12 Weeks

Assessment procedures: Weekly Assignment (25%) + proctored certification Exam (75%)

Curriculum of the Course:

Week 1: Introduction, Origin of automation, robot joints, classification of robots, work volume

Week 2: Vectors, spatial descriptions, rotation matrix, homogenous transformation matrix

Week 3: DH Parameters

Week 4: Forward Kinematics

Week 5: Inverse Kinematics

Week 6: Jacobian, Singularity, Manipulation ability

Week 7: Trajectory planning

Week 8: Statics and Dynamics of robotic manipulators

Week 9: Linear control of robot manipulators

Week 10: Force control

Week 11: Manipulator Mechanism Design

Week 12: Programming in VAL II

List of students enrolled

S.No.	Name of Student
1	Aman Sharma
2	Devaksh Narwara
3	divya arora
4	Hritik Gaur
5	Nakul Singh Jadon
6	Pulkit soni
7	Sandeep Verma