

## Course: Modern Construction Materials

**Course Code:** noc20-ce05

**Session:** 2019-20

**Duration:** 12 Weeks

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

### Curriculum of the Course:

Basics 0 Prologue – Introduction to the course  
1 Science, Engineering and Technology of Materials  
Module 2: Microstructure  
2 Atomic Bonding  
3 Structure of Solids  
4 Movement of Atoms  
5 Development of Microstructure  
Module 3: Material Behaviour  
6 Surface Properties  
7 Response to Stress  
8 Failure Theories  
9 Fracture Mechanics  
10 Rheology  
11 Thermal Properties  
12 Review of Construction Materials and Criteria for Selection  
13 Wood and Wood Products  
14 Polymers  
15 Fibre Reinforced Polymers  
16 Metals  
17 Bituminous Materials  
18 Concrete  
19 Glass  
20 Review of Non-structural Materials and Criteria for Selection  
21 Waterproofing materials  
22 Polymer Floor Finishes  
23 Paints  
24 Tiles  
25 Acoustic Treatment  
26 Dry walls  
27 Anchors  
28 Environmental Concerns  
29 Social Perception of Construction Materials  
30 Closure

### List of students enrolled

S. No	Name
1	Mateen Ahmed

2	Praveen Singh Rawat
3	Ritik Mathur
4	Satendra Singh
5	Saurabh Meena
6	Shruti Chauhan
7	Tanmay Sharma
8	Tushar Sharma
9	Vipul Vikram Mathur