

CONSTRUCTION INDUSTRY DEVELOPMENT COUNCIL



Course Details

1. The course will be officially launched by CIDC on 30 October 2019.
2. After launch, the online courses will Go-live with effect from 01 November 2019. The course will contain 12 study Modules and 01 examination Module at the end of the course. On successful completion of the course, CIDC will issue an online certificate "Digital Construction Management" to the students.
3. The entire course fee including certificate will be Rs 7500/- + applicable GST per student.
4. The first batch will be starting from 15 Nov 2019 and end on 14 Feb 2020 with issue of certificate by CIDC.
5. Being online course, thereafter any student who joins the course any time after 15 November 2019 by paying Rs. 7500/- + applicable GST online for the entire course at the beginning. On the payment of fees, the course content will get activated in sequence starting from Module -1, followed by activation of subsequent modules every week exactly on 8th day from the date of commencement of course till the end of the course and students can start learning.
6. After completion of the 12th week, an online examination will be conducted, mostly objective and based on the performance in examination, an online certificate will be issued by CIDC to all successful candidates.
7. The online course material is divided into 12 modules elaborated as under:

Module	Course Contents	Week
Module -1	<ul style="list-style-type: none"> • History of construction industry - Videos & Photos of world's unique projects • Importance of construction industry - political and economic perspective • Challenges faced by construction industry and youth perspective • Opportunities in construction industry • Need of digitalization in construction industry • What is digital construction • Digital Revolution 4.0 Technologies applicable in construction industry 	<p>Week 1 15-22 Nov 2019 <i>(the first batch starting from 15 Nov 2019 and ends on 14 Feb 2020 with issue of online certificate by CIDC). The cycle will continue likewise thereafter.</i></p>
Module -2	<ul style="list-style-type: none"> • Latest planning software • Latest architectural softwares • Prominent Design softwares • Prominent survey equipment • Latest ground survey technologies • LiDAR in construction industry • Latest Estimation Softwares and glimpses of their use 	<p>Week 2</p>
Module -3	<ul style="list-style-type: none"> • Latest earthwork equipments • Latest shuttering materials and technologies • Latest building materials - high strength cement, steel, concrete etc • Latest curing and plastering technologies • Modular construction and Prefabricated construction • Latest construction equipments • 3 D printing technology in construction industry • Futuristic construction materials 	<p>Week 3</p>
Module -4	<ul style="list-style-type: none"> • Latest project monitoring technologies • Latest project monitoring softwares • How to use PRIMAVERA, MSP and such project monitoring softwares • Project Monitoring and Information System • Trailing innovative technologies in construction industry 	<p>Week 4</p>

	<ul style="list-style-type: none"> • Drones in construction industry • IOT in construction industry • Robotics in construction industry 	
Module -5	<ul style="list-style-type: none"> • Use of GIS in construction industry • Remote sensing technology its components & applications in construction • Advance GPS software and data ecosystem in construction industry • Use of GIS in mapping electricity, gas, water bill payments etc • Cloud and Mobile based technologies in construction industry • Integration of construction industry with digitally connected world using GIS 	Week 5
Module -6	<ul style="list-style-type: none"> • Building Information Modelling • Advantage of BIM: why it is mandatory for infra industry in many countries • 3D, 4D, 5D BIM • iBIM and Digital Twin • Relevant Code of practice for Building Information Modelling 	Week 6
Module -7	<ul style="list-style-type: none"> • Augmented reality & virtual reality in construction industry • Simulation technology in constructive industry • Wireless monitoring and building automation • Remote site inspection and quality check of project using AR & VR • Digital Modelling 	Week 7
Module -8	<ul style="list-style-type: none"> • What is Artificial Intelligence • What is Deep learning and Machine learning • Application of AI in construction industry • Future of construction industry with AI • Use of AI in quality check 	Week 8
Module -9	<ul style="list-style-type: none"> • What is Blockchain • Use of Blockchain in construction industry • Use of Blockchain in operation & maintenance of infra projects • Funding strategies of Infrastructure projects • Infrastructure Bonds 	Week 9
Module -10	<ul style="list-style-type: none"> • Asset management of large infrastructures • Latest asset management technologies • Creation of digital inventory • Value bases budgeting of operation & maintenance of buildings • New equipments for quick maintenance 	Week 10

	<ul style="list-style-type: none"> • Use of Robots in repetitive maintenance & operations • IOT Sensor in Operation& maintenance • SCADA 	
Module -11	<ul style="list-style-type: none"> • Contract Management • Public Private Partnership contracts • FIDIC • Earned value management • Latest Software for Contract Managements • Use of Blockchain in Contract Management • Dispute and Dispute resolution mechanism - Claims & Counterclaims • Mediation, Conciliation and Arbitration • Latest government regulations on arbitration • Online Dispute Resolution (ODR) 	Week 11
Module -12	<ul style="list-style-type: none"> • RERA 2016 • Key provision of RERA for builders, buyers and government • RERA Definition of carpet area, built up area • Process of registration for RERA approval • Small cities and Urbanization • Building smart communities • Developing a smart city policy • Glimpses of Smart City of the world • Future of construction industry and global governance • Environmental & Social - Global Thinking. 	Week 12
Examination	Online examination	After completion of all 12 modules
Certification	Issue of certificate by CIDC	After online examination of successful candidates

