



ECI



CIDC

SHORT TERM INTERNSHIP PROGRAMS FOR ENGINEERING STUDENTS (DIPLOMA/DEGREE)

Basic Courses:

S.no	Course Code	Course name	Duration	Credit Points
1	CE/INT/01	Reading/ Understanding engineering Drawings	2 Days	2/150
2	CE/INT/02	Familiarization with Tools & implements Used for Construction	2 Days	2/ 150
3	CE/INT/03	Familiarization with concrete making Machinery/ Shuttering & Scaffolding /Laboratory Equipment	2 Days	2/150
4	CE/INT/04	Familiarization with Construction Material (Cement / Steel/ Bricks / Paints / Glass / etc.	2 Days	2/150
5	CE/INT/05	Familiarization with the site Management Systems (Part -1) (HR/ Maintenance Operations)	2 Days	2/150
6	CE/INT/06	Familiarization with the Site Management systems (Part -2) (Stores / Accounts / Safety / Quality Control)	2 Days	2/150
7	CE/INT/07	How to use Hand Tools (Mason/ Mechanical etc)	2 Days	2/150
8	CE/INT/08	How to run a Mixer & a vibrator & Mix The Concrete	2 Days	2/150
9	CE/INT/09	How to fix Scaffolds & lay Shuttering	2 Days	2/150
10	CE/INT/10	How to Design the Concrete Mix	2 Days	2/150
11	CE/INT/11	How to Conduct the field Tools on Cement , Aggregate, Sand & Bricks	2 Days	2/150
12	CE/INT/12	How to grind & weld	2 Days	2/150

Specialization: Lab Testing

S.no	Course Code	Course name	Duration	Credit Points
13	CE/INT/LAB/01/17	How to test the Aggregate	2 Days	2/150
14	CE/INT/LAB/02/17	How to test the Cement.	2 Days	2/150
15	CE/INT/LAB/03/17	Why do we use fly ash in construction	2 Days	2/150
16	CE/INT/LAB/04/17	How to test the soil	2 Days	2/150
17	CE/INT/LAB/05/17	How to use rebound hammer to assess the strength of concrete	1 Day	1/150
18	CE/INT/LAB/06/17	Why & How to cut the core of concrete	2 Days	2/150
19	CE/INT/LAB/07/17	How to test the bricks	2 Days	2/150
20	CE/INT/LAB/08/17	How to test the Bitumen	2 Days	2/150

Specialization: Surveying

S.no	Course Code	Course name	Duration	Credit Points
21	CE/INT/SUR/01/17	Basics of Plane Table Surveying,	2 Days	2/150
22	CE/INT/SUR/02/17	Basics of Theodolite survey	2 Days	2/150
23	CE/INT/SUR/03/17	How to use the Measuring Instruments	2 Days	2/150
24	CE/INT/SUR/04/17	Understanding Types of Scales and Maps	2 Days	2/150
25	CE/INT/SUR/05/17	Levelling Work and Contour Survey	6 Days	6/150
26	CE/INT/SUR/06/17	How to use the Total Station	6 Days	6/150
27	CE/INT/SUR/07/17	Control Point establishment	1 Day	1/150
28	CE/INT/SUR/08/17	Error adjustment in surveying	2 Days	2/150
29	CE/INT/SUR/09/17	Learn Remote height calculation	2 Days	2/150

30	CE/INT/SUR/10/17	Area and Volume calculations	2 Days	2/150
31	CE/INT/SUR/11/17	Data Management	4 Days	4/150
32	CE/INT/SUR/12/17	Transferring measurements to Auto Cad	4 Days	4/150

Specialization: Estimation, Specifications and Site Accounting

S.no	Course Code	Course name	Duration	Credit Points
33	CE/INT/EST/SP/S-ACC/01/17	Quantity takeoff from structural drawings	4 Days	4/150
34	CE/INT/EST/SP/S-ACC/02/17	Quantity takeoff from architectural drawings	4 Days	4/150
35	CE/INT/EST/SP/S-ACC/03/17	Costing of Civil works	4 Days	4/150
36	CE/INT/EST/SP/S-ACC/04/17	Understanding Productivity of Human Resources	4 Days	4/150
37	CE/INT/EST/SP/S-ACC/05/17	Understanding specifications	4 Days	4/150
38	CE/INT/EST/SP/S-ACC/06/17	Creating Bill of quantities	4 Days	4/150

Specialization: Electrical

S.no	Course Code	Course name	Duration	Credit Points
39	CE/INT/ELEC/01/17	Electric Safety precautions and system of wiring and color coding of wires	3 Days	3/150
40	CE/INT/ELEC/02/17	Ohm's law and their calculation of V.I.R and Power	2 Days	2/150
41	CE/INT/ELEC/03/17	Protective devices and their use according to load	2 Days	2/150
42	CE/INT/ELEC/04/17	Controlling devices and their links with electric connection	2 Days	2/150
43	CE/INT/ELEC/05/17	Connection of single/ Double tube light connection with testing procedure and rectification of fault	3 Days	3/150
44	CE/INT/ELEC/06/17	Repair of domestic Electrical Appliances (i) Room coolers/Desert cooler (ii) Ceiling fan/ Table fan/ Wall fan/ Pedestal fan (iii) Electric Iron/ Sandwich toaster (iv) Mixer Grinder/ Hand drill machine	4 Days	4/150

45	CE/INT/ELEC/06/17	Importance of earthing, types of earthing and testing procedure	2 Days	2/150
46	CE/INT/ELEC/08/17	Star/Delta connection in 3 Ø system and calculation of power	2 Days	2/150
47	CE/INT/ELEC/09/17	Transformer working principals, its parts, advantages, cooling system	2 Days	2/150
48	CE/INT/ELEC/10/17	Indian Measures and Weight	2 Days	2/150
49	CE/INT/ELEC/11/17	Electrical convention symbols, reading of electrical drawings	2 Days	2/150
50	CE/INT/ELEC/12/17	AC fundamentals, RLC circuits	3 Days	3/150
51	CE/INT/ELEC/13/17	Making of series and parallel circuits	3 Days	3/150
52	CE/INT/ELEC/14/17	Introduction to Sub-Station	2 Days	2/150
53	CE/INT/ELEC/15/17	Sub-Station Design Development	6 Days	6/150
54	CE/INT/ELEC/16/17	Sub-Station Design Calculations	6 Days	6/150
55	CE/INT/ELEC/17/17	Cable Routing	3 Days	3/150
56	CE/INT/ELEC/18/17	Earthing Protection Design	3 Days	3/150
57	CE/INT/ELEC/19/17	DSL/ Lightning Design	3 Days	3/150
58	CE/INT/ELEC/20/17	Illumination Design	3 Days	3/150
59	CE/INT/ELEC/21/17	Control & Protection System Design	3 Days	3/150
60	CE/INT/ELEC/22/17	Cable Selection & Sizing	3 Days	3/150
61	CE/INT/ELEC/23/17	Auxiliary System Design	3 Days	3/150
62	CE/INT/ELEC/24/17	Electrical Equipment/System Specification & Data Sheet	3 Days	3/150

Specialization: Barbending

S.no	Course Code	Course name	Duration	Credit Points
63	CE/INT/BB /01/17	Understanding Barbending schedule	3 Days	3/150
64	CE/INT/BB /02/17	Reinforcement of columns, footings, beams, lintel and sunshades	3 Days	3/150

65	CE/INT/BB /03/17	One way slab and two way slab reinforcement	2 Days	2/150
66	CE/INT/BB /04/17	Reinforcement of staircases	2 Days	2/150
67	CE/INT/BB /05/17	Do's and don'ts in reinforcement	1 Day	1/150

Specialization: Site Accountancy

S.no	Course Code	Course name	Duration	Credit Points
68	CE/INT/SA /01/17	Understanding Bill of quantities	4 Days	4/150
69	CE/INT/SA /02/17	Accountancy for civil engineers	7 Days	7/150
70	CE/INT/SA /03/17	Billing procedures and invoice generation	7 Days	7/150
71	CE/INT/SA /04/17	Site Coordination and wages marking	7 Days	7/150

Specialization: Structural

S.no	Course Code	Course name	Duration	Credit Points
72	CE/INT/STR /01/17	Basic Analysis & Design of Structures	3 Days	3/150
73	CE/INT/STR /02/17	Steel Frame Connection	2 Days	2/150
74	CE/INT/STR /03/17	Foundation Design.	2 Days	2/150
75	CE/INT/STR /04/17	Concrete Design & Analysis.	3 Days	3/150
76	CE/INT/STR /05/17	Pre- Engineered Buildings.	3 Days	3/150
77	CE/INT/STR /06/17	Construction Detailing & Drawings.	3 Days	3/150
78	CE/INT/STR /07/17	Storm Water & Sewage Design.	6 Days	6/150
79	CE/INT/STR /08/17	Bridges, Roads, & Design	6 Days	6/150
80	CE/INT/STR /09/17	Restoration & Rehabilitation of Structures.	3 Days	3/150
81	CE/INT/STR /10/17	Steel Analysis & Steel Design.	3 Days	3/150

Specialization: Site Planning

S.no	Course Code	Course name	Duration	Credit Points
82	CE/INT/S-PLG /01/17	Prerequisites of construction of any project	2 Days	2/150
83	CE/INT/S-PLG/02/17	Site planning establishment and management	2 Days	2/150
84	CE/INT/S-PLG/03/17	Layout and excavation	2 Days	2/150
85	CE/INT/S-PLG/04/17	Safety health and environment	2 Days	2/150
86	CE/INT/S-PLG/05/17	Procurement, and stacking of construction materials	2 Days	2/150
87	CE/INT/S-PLG/06/17	Maintenance and stocking of materials	2 Days	2/150
88	CE/INT/S-PLG/07/17	Site mobilization, layout of temporary facilities and installation	2 Days	2/150
89	CE/INT/S-PLG/08/17	Site visit and preparation of site visit report	2 Days	2/150
90	CE/INT/S-PLG/09/17	Laisioning work at project site	2 Days	2/150
91	CE/INT/S-PLG/10/17	General administration and management	2 Days	2/150
92	CE/INT/S-PLG/11/17	Ethics in construction	2 Days	2/150

Specialization: HVAC

S.no	Course Code	Course name	Duration	Credit Points
93	CE/INT/HVAC/01/17	Clean Room Environment technology.	2 Days	2/150
94	CE/INT/HVAC/02/17	Energy conservation study & design.	2 Days	2/150
95	CE/INT/HVAC/03/17	Ducting Design.	2 Days	2/150
96	CE/INT/HVAC/04/17	Cold Storage refrigeration system design.	2 Days	2/150

97	CE/INT/HVAC/05/17	VRV's / VRF's system for residential & commercial buildings.	2 Days	2/150
98	CE/INT/HVAC/06/17	Design of Warehouses & Industrial Ventilation System.	2 Days	2/150
99	CE/INT/HVAC/07/17	Chilled Ceiling Technology.	2 Days	2/150
100	CE/INT/HVAC/08/17	Mechanical Ventilation for Car Parking & Basement area.	2 Days	2/150
101	CE/INT/HVAC/09/17	Thermal Storage System Design.	2 Days	2/150
102	CE/INT/HVAC/10/17	VRV's / VRF's system for residential & commercial buildings.	2 Days	2/150

Specialization: Plumbing

S.No	Course Code	Course name	Duration	Credit Points
103	CE/INT/PLUMB/01/17	Plumbing system-water supply and drainage	2 Days	2/150
104	CE/INT/PLUMB/02/17	Domestic water supply and distribution system	2 Days	2/150
105	CE/INT/PLUMB/03/17	Plumbing layout drawings	2 Days	2/150
106	CE/INT/PLUMB/04/17	Fire extinguishing and Fire alarm systems	2 Days	2/150
107	CE/INT/PLUMB/05/17	Sanitary fixtures	2 Days	2/150
108	CE/INT/PLUMB/06/17	Hot and cold piping systems in bathrooms	2 Days	2/150
109	CE/INT/PLUMB/07/17	Fire detection, alarm and evacuation systems	2 Days	2/150
110	CE/INT/PLUMB/08/17	Wet riser system	2 Days	2/150
111	CE/INT/PLUMB/09/17	Laying, measuring, marking, cutting, threading, bending and jointing of external water supply systems	2 Days	2/150
112	CE/INT/PLUMB/10/17	Water supply service connection, testing of water supply lines	2 Days	2/150
113	CE/INT/PLUMB/11/17	Testing procedures of plumbing lines and construction of manholes, septic tanks and soakage pit	2 Days	2/150

Specialization: Formwork

S.no	Course Code	Course name	Duration	Credit Points
114	CE/INT/F-WORK/01/17	Work procedures of all types of formwork	2 Days	2/150
115	CE/INT/F-WORK/02/17	DE shuttering periods for forms	2 Days	2/150
116	CE/INT/F-WORK/03/17	Shuttering at heights using soldiers and shutters	2 Days	2/150
117	CE/INT/F-WORK/04/17	Placing and removal procedure of formwork	2 Days	2/150

Specialization: Masonry

S.no	Course Code	Course name	Duration	Credit Points
118	CE/INT/MASON/01/17	Building layout and setting out	2 Days	2/150
119	CE/INT/MASON/02/17	Transferring of levels and field testing of bricks, blocks, sand and cement	2 Days	2/150
120	CE/INT/MASON/03/17	Damp proof course	2 Days	2/150
121	CE/INT/MASON/04/17	Solid bricks and block masonry – Hollow concrete block masonry –	2 Days	2/150
122	CE/INT/MASON/05/17	Fixing of doors and windows frames	2 Days	2/150
123	CE/INT/MASON/06/17	Composite materials	2 Days	2/150

Specialization: Welding

S.no	Course Code	Course name	Duration	Credit Points
124	CE/INT/WELD/01/17	Principle of manual, metal, arc welding	2 Days	2/150
125	CE/INT/WELD/02/17	Arc welding machines	2 Days	2/150
126	CE/INT/WELD/03/17	Types of welding joints, position and types of welds	2 Days	2/150
127	CE/INT/WELD/04/17	Edge preparation and its importance	2 Days	2/150
128	CE/INT/WELD/05/17	Gas welding and gas cutting process	2 Days	2/150
129	CE/INT/WELD/06/17	Welding process with TIG, MIG, SAW – Advantages and limitations	2 Days	2/150

Specialization: Painting

S.No	Course Code	Course name	Duration	Credit Points
130	CE/INT/PAINT/01/17	Interior and exterior paints	2 Days	2/150
131	CE/INT/PAINT/02/17	Mixing methods of paints – Painting methods	2 Days	2/150
132	CE/INT/PAINT/03/17	Application of painting	2 Days	2/150
133	CE/INT/PAINT/04/17	spray painting, powder coating, anodizing, duco paints	2 Days	2/150
134	CE/INT/PAINT/05/17	Application of polish – Polyurethane coat etc	2 Days	2/150
135	CE/INT/PAINT/06/17	Drying methods	2 Days	2/150

Miscellaneous

S.no	Course Code	Course name	Duration	Credit Points
136	CE/INT/MISC/01/17	Soft skills	2 Days	2/150
137	CE/INT/MISC/02/17	Occupational hazards	2 Days	2/150
138	CE/INT/MISC/03/17	PPE	2 Days	2/150
139	CE/INT/MISC/04/17	Time management	2 Days	2/150
140	CE/INT/MISC/05/17	Negotiations skills	2 Days	2/150
141	CE/INT/MISC/06/17	Office documentation	2 Days	2/150
142	CE/INT/MISC/07/17	Concrete mixture proportioning	2 Days	2/150
143	CE/INT/MISC/08/17	Advances in Construction materials	2 Days	2/150
144	CE/INT/MISC/09/17	Climate friendly buildings	2 Days	2/150
145	CE/INT/MISC/10/17	Special concrete	2 Days	2/150
146	CE/INT/MISC/11/17	Admixtures and their application	2 Days	2/150
147	CE/INT/MISC/12/17	Precast concrete buildings	4 Days	4/150