

| COURSE MODULE | | | |
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| Course No. CE 41: Special Course on BCM/HOTBCM& SBCM | | | |
| Duration: 1Week Effective Days:06 | | | |
| CM No. | Subjects wise Contents | Periods | Total periods |
| 41.1 | Electrical & Electronics: | | 6 |
| | Engine circuit of BCM, SBCM & Troubleshooting. | 2 | |
| | PCBs of BCM & SBCM & Lifting Circuit of BCM. | 2 | |
| | Driving/Lighting/Intercom Circuits of BCM & SBCM. | 2 | |
| 41.2 | Hydraulics, Pneumatics & Mechanical: | | 8 |
| | Pump layout, Axial piston pump, Pressure relief valve, Direction Control valves & Troubleshooting. | 2 | |
| | Hydraulic Circuits of BCM - Traction Drive, Conveyor Drive, Vibration Screen, Lubrication, Chain Drive | 2 | |
| | Hydraulic Circuits of SBCM- Traction Drive, Conveyor Drive, Vibration Screen, Lubrication, Chain Drive. | 2 | |
| | Pneumatic Circuits of BCM & SBCM - Working circuit, Brake circuit & Troubleshooting. Power transmission of BCM & SBCM. | 2 | |
| 41.3 | I.C. Engine: | | 4 |
| | Technical details of BCM & SBCM Engines, Constructional features, | 1 | |
| | Injector/Cross head/Valve adjustment, Lubricating oil flow diagram. Coolant flow diagram, | 1 | |
| | Air flow diagram, Fuel flow diagram | 1 | |
| | Removal of Air lock & Troubleshooting. | 1 | |
| 41.4 | Track Machines & Working Principles: | | 14 |
| | BCM - Main features, Excavating Unit, Screening unit, Conveyor units, Axle Clutches, Cutting chain materials, Wear plates, Conveyor Belt Drive, Dredger Drum. | 2 | |
| | BCM - Working Principle, Splicing & spot repair of conveyors, Good maintenance practices to increase life of Conveyors & Cutting chain, Precautions during work | 2 | |
| | Main features & Main Units viz Excavating Unit, Screening unit, Conveyor units, Axle Clutches Cutting chain materials, Wear plates, Conveyor Belt Drive station, Dredger stationetc. | 2 | |
| | SBCM - Working Principle & Precautions during work. | 2 | |
| | RDSO Maintenance schedules, Inspection check lists & Troubleshooting Guide on BCM & SBCM | 2 | |
| | Quality Control – to avoid cutting of formation & shifting of curve, to ensure uniform L.L., Pre-requisite, Pre, During & Post Block operations | 2 | |
| | Rules for movement and Block working including action in case of machine breakdown. | 2 | |
| 41.5 | Introduction and Valediction | 2 | 2 |
| | Total | 34 | 34 |

Note: Eligibility: SSE/SE/JE and Technicians