

## PG DIPLOMA IN METRO RAIL TECHNOLOGY AND MANAGEMENT

(Sponsored by Chennai Metro Rail Limited)

Participating Departments: **Civil, Mech, Electrical and Management Studies**

Duration: **Two semesters**

Minimum credits: **39**

### Semester-1

Course #	Course Name	Credits	Type
CE6050	Lean Construction Concepts, Tools and Practices	3	core
CE5331	Metro systems and Engineering	3	Core
CE5020	Construction planning and control	3	Core
CE6010	Construction contracts and specifications	3	Core
MS 5260	Management Information Systems	2	Core
CE5130	Construction quality and safety management	3	Core
	Departmental Elective-1	3 or 4	Elective

### Semester-2

Course #	Course Name	Credits	Type
CE5332	Special Topics in Metro Engineering	3	Core
CE5335	Metro Internship	2	Core
	Common Elective-1 (from Group I)	2 or 3	Elective
	Common Elective-2 (from Group II)	2 or 3	Elective
	Departmental Elective-2	3 or 4	Elective
	Departmental Elective-3	3 or 4	Elective
	Departmental Elective-4	3 or 4	Elective

### List of Common Electives (Group I)

Course #	Course name	Credits	Dept.
CE6180	Environmental Impact Assessment	3	CE
MS5520	Simulation Modelling and Analysis	2	MS
CE5336	Professional Ethics (Self study)	2	CE

### List of Common Electives (Group II)

Course #	Course name	Credits	Dept.
MS5050	Marketing Management I	2	MS
MS5150	Marketing Management II	2	MS
MS6690	Working Capital Management	2	MS
MS5570	Heuristics for Decision Making	2	MS
MS5240	Financial Management	2	MS
CE5337	Non-destructive evaluation of structures	3	CE

### Electives from Department of Civil Engineering

Course #	Course name	Credits
CE5040	Construction methods and equipment	3
CE5120	Maintenance and rehabilitation of constructed facilities	3
CE5330	Advanced Foundation Engineering	4
CE5300	Applied Soil Mechanics	4
CE5870	Infrastructure planning and management	3
CE6110	Advanced concrete technology	3
CE6710	Bridge Engineering	3
CE 5338	Underground Space Technology	3

### Electives from Department of Electrical Engineering

Course #	Course name	Credits
EE5610	Transducers for Instrumentation & Process	3
EE5870	Power Electronic Control of Electric Machines	4
EE5880	Power System Control and Stability	4
EE5970	Energy Management Systems and SCADA	3
EE6170	Introduction to Wireless and Cellular Communications	4

### Electives from Department of Mechanical Engineering

Course #	Course name	Credits
ME6500	Air conditioning and Ventilation	3
ME6660	Fans, Blowers and Compressors	3
ME7740	Structural Health and Integrity Monitoring	3
ME7870	Diagonistic Maintenance	3
ME7880	Vehicular Vibration	3