

Bharath Institute of Higher Education and Research

B.Tech-Civil Engineering

Prerequisites & Co requisites Table

Sub Code	Subject Title	Category of course (H/B/E/P/OE /NE/CE/PR)	Prerequisite courses	Co requisites courses
BEN101	English – I	H	+2 Level English	NIL
BMA101	Mathematics – I	B	+2 Level Maths	NIL
BPH101	Engineering Physics – I	B	+2 Level Physics	NIL
BCH101	Engineering Chemistry – I	B	+2 Level Chemistry	NIL
BCS101	Fundamentals of Computing and Programming	E	+2 Level Physics	NIL
BBA101	Personality Development	H	+2 Level Knowledge	NIL
BBT 102	Biology for Engineers	B	Basic Science	NIL
BME101	Engineering Graphics – E	E	+2 Level Maths & Physical Science	NIL
BME103	Basic Mechanical Engineering	E	+2 Level Maths & Physical Science	NIL
BCM1L1	Basic Civil and Mechanical Engineering Practices Laboratory	E	+2 Level Maths & Physical Science	NIL
BSS1L5	NSS	H	NIL	NIL

II SEMESTER				
BEN201	English – II	H	English I	NIL
BMA201	Engineering Mathematics – II	B	Maths I	NIL
BPH201	Engineering physics – II	B	Physics I	NIL
BCH201	Engineering Chemistry – II	B	Chemistry I	NIL
BFR201	French	H	+2 Level English	NIL
BGM201	German	H	+2 Level English	NIL
BJP201	Japanese	H	+2 Level English	NIL
BKR201	Korean	H	+2 Level English	NIL
BCN201	Chinese	H	+2 Level English	NIL
BME202	Engineering Mechanics	E	Engineering Physics –I Engineering Mathematics I	Engineering Mathematics II
BEE201	Basics Electrical and Electronics Engineering	E	Engineering Physics –I Engineering Mathematics I	Engineering Physics –II Engineering Mathematics II
BCS2L2	Computer Practices Lab	E	Fundamentals of Computer	
BEE2L1	Basics Electrical and Electronics Engineering Practices Laboratory	E	NIL	Basic Electrical and Electronics Engineering
BPC2L1	Physics and Chemistry Laboratory	B	Engineering Physics –I Engineering Chemistry I	Engineering Physics –II Engineering Chemistry
BSS2L7	Yoga	H	NIL	NIL

III SEMESTER				
BMA301	Mathematics III	B	Maths II	NIL
BCE301	Applied Mechanics	P	Engineering Mechanics	NIL
BCE302	Surveying I	P	Basic Mechanical Engineering	NIL
BCE303	Building Construction Technology	P	Basic Mechanical Engineering	NIL
BCE304	Fluid Mechanics	P	Engineering Mechanics	NIL
BCE305	Engineering Earth Science	P	+2 level science	NIL
BCE3L1	Surveying Practical – I	P	NIL	Survey I
BCE3L2	Strength Of Materials Lab	P	Engineering Mechanics	NIL
IV SEMESTER				
BMA402	Numerical Methods	B	Mathematics III	NIL
BCE401	Theory of Structures	P	NIL	Basic Structural Design
BCE402	Surveying II	P	Surveying I	NIL
BCE403	Soil Mechanics	P	Engineering Mechanics	NIL
BCE404	Basic Structural Design	P	Basic Mechanical Engineering	NIL
BCE405	Transportation Engineering	P	Basic Mechanical Engineering	NIL
BCE406	Environmental Studies	H	Physical Science	NIL

BCE4L1	Surveying Practical II	P	Surveying Practical I	NIL
BCE4L2	Soil Mechanics Lab	P	NIL	Soil Mechanics
V SEMESTER				
BMA501	Probability and Statistics in Civil Engineering	P	Numerical Methods	NIL
BCE501	Structural Analysis – I	P	Basic Structural Engg	NIL
BCE502	Applied Hydraulic Engineering	P	Fluid Mechanic	NIL
BCE503	Foundation Engineering	P	Soil Mechanics	NIL
BCE504	Reinforced Concrete Structures - I	P	Theory of Structure	NIL
BCE505	Environmental Engineering	P	Environmental Studies	NIL
BCE5L1	Construction Engineering Lab	CE	BCME LAB	NIL
BCE5L2	Fluid Mechanics and Machinery Lab	P	Fluid Mechanics	NIL
BCE5C1	Comprehension I	PR	NIL	NIL
VI SEMESTER				
BCE601	Structural Analysis – II	P	Structural Analysis – I	NIL
BCE602	Reinforced Concrete Structures - II	P	Reinforced Concrete Structures - I	NIL
BCE603	Irrigation Engineering	P	Fluid Mechanic	NIL
BSS601	Value Education and Professional Ethics	H	NIL	NIL

BCE6L1	Computer Aided Building Drawing	P	Computer Practices Lab	NIL
BCE6L2	Environmental Engineering Lab	P	Physics and Chemistry Laboratory	NIL
VII SEMESTER				
BCE701	Estimation & Costing	P	Building Construction Technology	NIL
BCE702	Computer Aided Design of Structures	P	Computer Aided Building Drawing	NIL
BCE703	Design of Steel Structures	p	Basic Structural Design	NIL
BCE704	Management Concepts For Civil Engineers	p	NIL	NIL
BCE7L1	Computer Aided Design Of Structures Laboratory	p	NIL	Computer Aided Design of Structures
BCE7L2	Computer Aided Design and Drafting Laboratory(R.C.C, Steel, Irrigation & Environment)	p	Computer Aided Building Drawing	NIL
CORE ELECTIVE I				
BCE051	Concrete Technology	CE	Building Construction Technology	NIL
BCE052	Industrial Structures	CE	NIL	Reinforced Concrete Structures - I
BCE053	Advanced Construction Techniques	CE	Building Construction Technology	NIL
BCE054	Construction Planning, Scheduling and Control	CE	Environmental Engineering	NIL
BCE055	Industrial Waste Treatment and Disposal	CE	NIL	Environmental Engineering
BCE056	Solid and Hazardous Waste Management	CE	NIL	Environmental Engineering

CORE ELECTIVE II				
BCE057	Design of R.C. Framed Structures	CE	Reinforced Concrete Structures – I	NIL
BCE058	Tall Structures	CE	Structural Analysis – I	NIL
BCE059	Safety Practices in Construction	CE	Building Construction Technology	NIL
BCE060	Modern Construction Materials	CE	Building Construction Technology	NIL
BCE061	Air and Noise Pollution	CE	Environmental Studies	NIL
BCE062	Environmental Impact Assessment	CE	Environmental Engineering	NIL
CORE ELECTIVE III				
BCE063	Pre stressed Concrete Structures	CE	Reinforced Concrete Structures – I	NIL
BCE064	Advanced Concrete Design	CE	Structural Analysis – I	NIL
BCE065	Construction Equipment	CE	Building Construction Technology	NIL
BCE066	Prefabrication and Construction Techniques	CE	Building Construction Technology	NIL
BCE067	Environmental Health Engineering	CE	Environmental Studies	NIL
BCE068	Indoor Air Quality	CE	Environmental Engineering	NIL
Non Major Elective - I				

BCE069	Matrix Methods of Structural Analysis	NE	NIL	Structural Analysis II
BCE070	Concrete Structures	NE	Reinforced Concrete Structures I	NIL
BCE071	Shoring, Scaffolding and Formwork	NE	Building Construction Technology	NIL
BCE072	Construction Project Management	NE	Building Construction Technology	NIL
BCE073	Ground Water Contamination and Transport Modeling	NE	Environmental Engineering	NIL
BCE074	Physical and Chemical Treatment of Water and Wastewater	NE	Environmental Engineering	NIL
BCE075	Ground Water Engineering	NE	Irrigation Engineering	NIL
BCE076	Coastal Engineering	NE	Fluid Mechanics	NIL
Non Major Elective - II				
BCE077	Finite Element Analysis	NE	Structural Analysis II	NIL
BCE078	Structures on Expansive Soil	NE	Soil Mechanics	NIL
BCE079	Quality Control and Assurance in Construction	NE	Building Construction Technology	NIL
BCE080	Construction Personnel Management	NE	Personality Development	NIL
BCE081	Water and Sewage Conveyance	NE	Applied Hydraulic Engineering	NIL
BCE082	Environmental Engineering Structures	NE	Environmental Engineering	NIL
BCE083	Soil Dynamics and Machine Foundation	NE	Soil Mechanics	NIL
BCE084	Hydrology	NE	Fluid Mechanics	NIL

Open Elective - I				
BCE093	Remote Sensing and GIS	OE	Engineering Physics II	NIL
BBA008	Total Quality Management	OE	NIL	NIL
BCE094	Optimization Techniques	OE	Fundamental of Computing and Programming	NIL
Open Elective - II				
BCE095	Geographic Information System	OE	Remote Sensing and GIS	NIL
BCE096	Engineering Economics	OE	Management Concepts for Civil Engineers	NIL
BCE097	Renewable Sources of Energy	OE	Engineering Earth Science	NIL