

	Tulsiramji Gaikwad-Patil College of Engineering and Technology Wardha Road, Nagpur-441 108 NAAC Accredited with A+ Grade (An Autonomous Institute Affiliated to RTM Nagpur University, Nagpur)	
Program: B.Tech. Civil Engineering		
Semester VII		

BCE4715: Program Elective-VII (Foundation Engineering)

	Course Outcomes	CL	Class Sessions
BCE4715.1	Contrast foundations, types of foundations, bearing capacity and settlement of foundations; ground movements due to construction, Foundations on Problematic soils: Problems and Remedies.	4	9
BCE4715.2	Explain Well Foundations: Caissons – Types, advantages and disadvantages, Shapes and component parts, Foundation Failures, Remedial measures, Shoring and Underpinning.	4	9
BCE4715.3	Infer Raft Foundation: Settlement and Bearing Capacity analysis, settlements. Proportioning of footing, Inclined & Eccentric loads. Settlement of footings on stratified deposits.	4	9
BCE4715.4	Create Shallow Foundation: General bearing capacity equation, I.S. Code method, Effect of foundation shape, eccentricity and inclination of load, Influence of soil compressibility and water table, Limit state design .	6	9
BCE4715.5	Design Pile Foundations; Classification and Uses, Carrying capacity, Pile groups – Group efficiency, Negative skin friction, sharing of loads, : Limit state design.	6	9