

Course Number and Name												
BCE305 - ENGINEERING EARTH SCIENCE												
Credits and Contact Hours												
3 & 45												
Course Coordinator's Name												
Dr.S.Buvaneshwari												
Course Objective												
<ul style="list-style-type: none"> To understand the importance of geological knowledge such as earth, earthquake and to apply this knowledge in projects such as dams, tunnels, bridges, roads, airport and harbor as well as to choose types of foundations. An ability to function on multi-disciplinary teams. Graduates will be capable of utilizing their backgrounds in engineering and earth science to provide solutions to engineering problems within the context of the natural world. Areas of geological engineering practice might include fluid flow and contaminant transport in the subsurface; geo-mechanics (i.e., the behavior of earth materials), geo-engineering (i.e., design with earth materials); and discovery, development, and utilization of energy resources. 												
Prerequisites						Co-requisites						
+2 level science						NIL						
required, elective, or selected elective (as per Table 5-1)												
Course Outcomes (COs)												
CO1	To understand the role of geology in the design and construction process of underground openings in rock											
CO2	Be able to apply geologic concepts and approaches on rock engineering projects.											
CO3	Be able to identify and classify rock using basic geologic classification systems.											
CO4	Be able to use the geologic literature to establish the geotechnical framework needed to properly design and construct heavy civil works rock projects.											
CO5	To assign projects which test student knowledge and application of intact rock and rock mass properties in geotechnical engineering											
Student Outcomes (SOs) from Criterion 3 covered by this Course												
COs/SOs	a	b	c	d	e	f	g	h	i	j	k	
CO1	H			H		H	H		M			
CO2	H			H		H	H		M			
CO3	H			H		H	H		M			
CO4	H			H		H	H		M			
CO5	H			H		H	H		M			