



**BIRLA INSTITUTE OF TECHNOLOGY**  
**MESRA, RANCHI – 835215, INDIA**  
**Course Structure Session - 2016**  
**UNDERGRADUATE (Full Time)**

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Program : **BACHELOR OF ENGINEERING**

Branch : **B.E CIVIL ENGINEERING**

Semester : 1

Total Credits: 29

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
AM1201	ENGINEERING MECHANICS	4.00
CH1401	ENGINEERING CHEMISTRY	3.00
EC2001	PRINCIPLES OF ELECTRONICS ENGINEERING	3.00
MA1201	ENGINEERING MATHEMATICS	4.00
PH1201	PHYSICS	4.00
CH1402	CHEMISTRY LAB	2.00
CS1302	FUNDAMENTAL OF UNIX & C PROGRAMMING	3.00
EC2002	BASIC ELECTRONICS ENGINEERING LAB	2.00
ME1202	ENGINEERING GRAPHICS	3.00
<b>Activity</b>	<b>( CHOICE FOR ONLY ONE )</b>	
GA1002	NCC	1.00
GA1004	NSS	1.00
GA1006	PT & GAMES	1.00
GA1008	CREATIVE ARTS	1.00



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Program : **BACHELOR OF ENGINEERING**

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Semester : 2

Total Credits: 30

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CH2203	ENVIRONMENTAL SCIENCE	3.00
CS2301	FUNDAMENTAL OF DATA STRUCTURE	4.00
EE2201	PRINCIPLES OF ELECTRICAL ENGG	4.00
HU1101	TECHNICAL ENGLISH	3.00
MA2201	ADVANCE ENGINEERING MATHEMATICS	4.00
ME2001	PRINCIPLES OF MECHANICAL ENGINEERING	3.00
AM2202	ENGINEERING MECHANICS LAB	2.00
CS2302	DATA STRUCTURE LAB	2.00
PE1202	WORKSHOP PRACTICE	2.00
PH1202	PHYSICS LAB	2.00
<b>Activity</b>	<b>( CHOICE FOR ONLY ONE )</b>	
GA2002	NCC	1.00
GA2004	NSS	1.00
GA2006	PT & GAMES	1.00
GA2008	CREATIVE ARTS	1.00



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Program : **BACHELOR OF ENGINEERING**

Branch : **B.E CIVIL ENGINEERING**

Semester : 3

Total Credits: 24

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CE3001	STRENGTH OF MATERIALS	3.00
CE3003	SURVEYING-1	3.00
CE3005	GEOTECHNICAL ENGINEERING-I	3.00
CE3007	BUILDING MATERIALS & CONSTRUCTION	3.00
CE3002	STRENGTH OF MATERIALS LAB	2.00
CE3004	SURVEYING-I(SESSIONAL)	2.00
CE3006	ENGG GEOLOGY AND ROCK MECHANICS	2.00
EE3202	BASIC ELECTRICAL ENGINEERING LAB	2.00
<b>Activity</b>	<b>( CHOICE FOR ONLY ONE )</b>	
GA3002	NCC	1.00
GA3004	NSS	1.00
GA3006	PT & GAMES	1.00
GA3008	CREATIVE ARTS	1.00
<b>Breadth Paper</b>	<b>( CHOICE FOR ONLY ONE )</b>	
HU4001	FRENCH	3.00
HU4003	GERMAN	3.00



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Program : **BACHELOR OF ENGINEERING**

Branch : **B.E CIVIL ENGINEERING**

Semester : **4**

Total Credits: **23**

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
BT3021	BIOLOGICAL SCIENCE	3.00
CE4001	STRUCTURAL ANALYSIS-I	3.00
CE4003	STRUCTURAL DESIGN-I	4.00
CE4005	TRANSPORTATION ENGINEERING-I	3.00
CE4007	FLUID MECHANICS-I	3.00
CE4002	STRUCTURAL DESIGN-I LAB	2.00
CE4004	FLUID MECHANICS-I LABORATORY	2.00
CE4006	CIVIL ENGINEERING DRAWING LAB	2.00
<b>Activity</b>	<b>( CHOICE FOR ONLY ONE )</b>	
GA4002	NCC	1.00
GA4004	NSS	1.00
GA4006	PT & GAMES	1.00
GA4008	CREATIVE ARTS	1.00



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Program : **BACHELOR OF ENGINEERING**

Branch : **B.E CIVIL ENGINEERING**

Semester : 5

Total Credits: 22

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CE5003	FLUID MECHANICS-II	3.00
CE5005	STRUCTURAL DESIGN-II	4.00
CE5007	CONSTRUCTION PLANNING & MGMT	3.00
CE5001	STRUCTURAL ANALYSIS-II	3.00
CE5004	SPECIFICATION, ESTIMATION & COSTING (SESSIONAL)	2.00
CE5002	STRUCTURAL DESIGN-II (SESSIONAL)	2.00
CE5006	FLUID MECHANICS LABORATORY-II	2.00
<b>Breadth Paper ( CHOICE FOR ONLY ONE )</b>		
PE5009	INDUSTRIAL ORGANIZATION AND MANAGEMENT	3.00
PE5011	PROJECT ENGINEERING	3.00
MSH1125	ORGANISATION BEHAVIOUR	3.00
MSH1131	PRINCIPLES OF MANAGEMENT	3.00



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Program : **BACHELOR OF ENGINEERING**

Branch : **B.E CIVIL ENGINEERING**

Semester : 6

Total Credits: 21

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CE6001	ENVIRONMENTAL ENGINEERING	3.00
CE6003	TRANSPORTATION ENGINEERING-II	3.00
CE6005	SURVEYING- II	3.00
CE6007	GEOTECHNICAL ENGINEERING-II	3.00
CE6002	SURVEYING-II (SESSIONAL)	2.00
CE6004	ENVIRONMENTAL ENGINEERING LAB	2.00
CE6006	GEOTECHNICAL ENGINEERING LAB	2.00
<b>Elective - 1</b>	<b>( CHOICE FOR ONLY ONE )</b>	
MSH1115	HUMAN RESOURCE MANAGEMENT	3.00
MSH1121	MARKETING MANAGEMENT	3.00
MSH1123	OPERATION RESEARCH	3.00
MSH1137	ECONOMICS	3.00
PE6009	ENGINEERING ECONOMY	3.00



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Program : **BACHELOR OF ENGINEERING**

Branch : **B.E CIVIL ENGINEERING**

Semester : 7

Total Credits: 26

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CE7001	EARTHQUAKE RESISTANT DESIGN	3.00
CE7003	IRRIGATION ENGINEERING AND HYDROLOGY	3.00
CE7002	COMPUTER AIDED ANALYSIS & DESIGN LAB	2.00
CE7004	DESIGN AND DRAWING OF HYDRAULIC STRUCTURES (SESSIONAL)	2.00
CE7006	CONCRETE AND ROAD MATERIALS LAB	2.00
<b>Breadth Paper</b>	<b>( CHOICE FOR ONLY ONE )</b>	
MSH1117	FINANCIAL MANAGEMENT	3.00
MSH1103	BUSINESS ETHICS	3.00
MSH1109	ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT	3.00
<b>Elective - 1</b>	<b>( CHOICE FOR ONLY ONE )</b>	
CE7013	DISASTER MANAGEMENT	3.00
CE7015	WATERSHED ENGINEERING AND MANAGEMENT	3.00
<b>Elective - 2</b>	<b>( CHOICE FOR ONLY ONE )</b>	
CE8003	HARBOUR, DOCK & AIRPORT ENGINEERING	3.00
CE8005	ROCK MECHANICS AND APPLICATIONS OF CIVIL ENGINEERING TO SURFACE MINING	3.00
CE8007	GROUND WATER ENGINEERING	3.00
CE8011	DAM AND WATER POWER ENGINEERING	3.00
<b>Free Elective</b>	<b>( CHOICE FOR ONLY ONE )</b>	
CE7021	ENVIRONMENTAL ENGINEERING	3.00
ME7015	CFD	3.00
ME7039	MECHATRONICS	3.00
EE3207	ELECTRIC ENERGY GENERATION & CONTROL	3.00
PE7021	MAINTENANCE ENGINEERING	3.00
PE7005	COMPETITIVE MANUFACTURING STRATEGIES	3.00
MEC2019	MICRO-ELECTRO-MECHANICAL-SYSTEMS	3.00



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Program : **BACHELOR OF ENGINEERING**

Branch : **B.E CIVIL ENGINEERING**

Semester : **8**

Total Credits: **9**

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CE8002	PROJECT / INDUSTRIAL TRAINING	4.00
CE8004	STRUCTURAL ENGINEERING LABORATORY	2.00
<b>Elective - 1</b>	<b>( CHOICE FOR ONLY ONE )</b>	
CE8001	ENVIRONMENTAL POLLUTION & CONTROL	3.00
CE8011	DAM AND WATER POWER ENGINEERING	3.00