



**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. COMPUTER SCIENCE & ENGG**

Semester : 1

Total Credits: 29

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CH1401	ENGINEERING CHEMISTRY	3.00
CS1302	FUNDAMENTAL OF UNIX & C PROGRAMMING	3.00
EE2201	PRINCIPLES OF ELECTRICAL ENGG	4.00
HU1101	TECHNICAL ENGLISH	3.00
MA1201	ENGINEERING MATHEMATICS	4.00
ME1202	ENGINEERING GRAPHICS	3.00
PE1202	WORKSHOP PRACTICE	2.00
PH1201	PHYSICS	4.00
PH1202	PHYSICS LAB	2.00
<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>
AM1201	ENGINEERING MECHANICS	4.00
CH2203	ENVIRONMENTAL SCIENCE	3.00
CS2301	FUNDAMENTAL OF DATA STRUCTURE	4.00
EC2001	PRINCIPLES OF ELECTRONICS ENGINEERING	3.00
MA2201	ADVANCE ENGINEERING MATHEMATICS	4.00
ME2001	PRINCIPLES OF MECHANICAL ENGINEERING	3.00
CH1402	CHEMISTRY LAB	2.00
CS2302	DATA STRUCTURE LAB	2.00
EC2002	BASIC ELECTRONICS ENGINEERING LAB	2.00
EE3202	BASIC ELECTRICAL ENGINEERING 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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Semester : 3

Total Credits: 23

Subject Code	Subject Title	Credit
CS3005	OBJECT ORIENTED PROGRAMMING USING JAVA	3.00
EC3201	DIGITAL ELECTRONICS	4.00
CS4101	DISCRETE MATHEMATICAL STRUCTURES	3.00
CS6101	DESIGN & ANALYSIS OF COMPUTER ALGORITHMS	3.00
CS3006	OBJECT ORIENTED PROGRAMMING LAB	2.00
EC3202	DIGITAL ELECTRONICS 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>	
BT3021	BIOLOGICAL SCIENCE	3.00
<b>Sessionals</b>	<b>( CHOICE FOR ONLY ONE )</b>	
AM2202	ENGINEERING MECHANICS LAB	2.00



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Program : **BACHELOR OF ENGINEERING**  
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Semester : 4

Total Credits: 23

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CS4107	OPERATING SYSTEMS	3.00
CS4109	COMPUTER SYSTEM ARCHITECTURE	4.00
CS4205	DATABASE MANAGEMENT SYSTEMS	3.00
MA4109	PROBABILITY, STATISTICS AND NUMERICAL TECHNIQUES	3.00
CS4108	OPERATING SYSTEMS LAB	2.00
CS4206	DBMS LAB	2.00
MA4110	NUMERICAL TECHNIQUES 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
<b>Elective - 1</b>	<b>( CHOICE FOR ONLY ONE )</b>	
HU4001	FRENCH	3.00
HU4003	GERMAN	3.00



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Program : **BACHELOR OF ENGINEERING**  
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Semester : 5

Total Credits: 22

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CS6107	COMPUTER NETWORKS	3.00
EC4205	MICROPROCESSOR AND MICROCONTROLLER	3.00
CS5101	FORMAL LANGUAGES AND AUTOMATA THEORY	4.00
CS8101	ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEMS	3.00
CS6108	COMPUTER NETWORKING LAB	2.00
EC4206	MICROPROCESSOR APPLICATION LAB	2.00
CS8102	ARTIFICIAL INTELLIGENCE LAB	2.00
<b>Breadth Paper ( CHOICE FOR ONLY ONE )</b>		
MSH1125	ORGANISATION BEHAVIOUR	3.00
MSH1131	PRINCIPLES OF MANAGEMENT	3.00
PE5009	INDUSTRIAL ORGANIZATION AND MANAGEMENT	3.00
PE5011	PROJECT ENGINEERING	3.00



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Semester : 6

Total Credits: 22

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CS6011	COMPUTER GRAPHICS AND MULTIMEDIA	3.00
CS6103	SYSTEM PROGRAMMING	4.00
CS6105	COMPILER DESIGN	3.00
CS6109	SOFTWARE ENGINEERING	3.00
CS6012	COMPUTER GRAPHICS AND MULTIMEDIA LAB	2.00
CS6106	COMPILER DESIGN LAB.	2.00
CS6110	SOFTWARE 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**  
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Semester : 7

Total Credits: 15

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CS5105	SOFT COMPUTING	3.00
CS5106	SOFT COMPUTING LAB	2.00
CS7014	PROJECT	4.00
<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>	
CS7107	DIGITAL IMAGE PROCESSING	3.00



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Program : **BACHELOR OF ENGINEERING**  
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Semester : 8

Total Credits: 15

<b>Subject Code</b>	<b>Subject Title</b>	<b>Credit</b>
CS8031	DATA MINING & DATA WAREHOUSING	3.00
CS8014	PROJECT	6.00
<b>Elective - 1</b>	<b>( CHOICE FOR ONLY ONE )</b>	
CS8029	PARALLEL & DISTRIBUTED SYSTEMS	3.00
<b>Elective - 2</b>	<b>( CHOICE FOR ONLY ONE )</b>	
CS7127	SOFTWARE PROJECT MANAGEMENT	3.00