



**Scheme of Instruction & Syllabi**  
**of**  
**(Integrated Course )**

**B.Tech(CSE) + MBA**

**(Effective From 2016-2017)**

**Invertis Institute of Engineering & Technology**

**INVERTIS UNIVERSITY**

**Invertis Village, Bareilly-Lucknow NH-24, Bareilly**

**STUDY & EVALUATION SCHEME**  
**Integrated B. Tech. & M.Tech.( Computer Science & Engineering)**  
**YEAR II, SEMESTER-III**

S.NO.	COURSE CODE	SUBJECTS	PERIODS			Evaluation Scheme				SUBJECT TOTAL	CREDITS
						SESSIONAL EXAM.			E-SEM		
			L	T	P	CT	TA	TOTAL			
<b>THEORY</b>											
1	BHU-302/BHU-301	Industrial Sociology / Industrial Psychology	2	1	0	10	5	15	35	50	2
2	BAS-301/BOE-031-038	Mathematics-III /Science elective	3	1	0	20	10	30	70	100	4
3	BEC-305	Digital Logic Design	3	1	0	20	10	30	70	100	4
4	BCS-301	Data Structures	3	1	0	20	10	30	70	100	4
5	BCS-302	Discrete Structures	3	1	0	20	10	30	70	100	4
6	BIT-301	IT Infrastructure and its Management	3	1	0	20	10	30	70	100	4
<b>PRACTICALS &amp; PROJECTS</b>											
7	BEC-355	Digital Logic Design Lab	0	0	2	-	-	10	15	25	1
8	BCS-351	Data structures Lab	0	0	2	-	-	10	15	25	1
9	BIT-351	IT Infrastructure and its Management Lab	0	0	2	-	-	10	15	25	1
10	GP-301	General Proficiency	-	-	-	-	-	25	-	25	1
<b>Total</b>			<b>17</b>	<b>6</b>	<b>6</b>	<b>110</b>	<b>55</b>	<b>220</b>	<b>430</b>	<b>650</b>	<b>26</b>

S.NO.	COURSE CODE	SUBJECTS	PERIODS			Evaluation Scheme				SUBJECT TOTAL	CREDITS
						SESSIONAL	EXAM.				
<b>STUDY &amp; EVALUATION SCHEME</b>											
<b>Integrated B. Tech. &amp; M.Tech. (Computer Science &amp; Engg)</b>											
<b>YEAR II, SEMESTER-IV</b>											
<b>THEORY</b>											
1	BHU-402 /BHU-401	Industrial Sociology / Industrial Psychology	2	1	0	10	5	15	35	50	2
2	BAS-401 /BOE-041-048	Mathematics-III /Science elective	3	1	0	20	10	30	70	100	4
3	BCS-401	Computer Organization & Introduction to Microprocessor	3	1	0	20	10	30	70	100	4
4	BCS-402	Design and Analysis of Algorithms	3	1	0	20	10	30	70	100	4
5	BCS-403	Operating System	3	1	0	20	10	30	70	100	4
6	BCS-404	Unix & Shell Programming	3	1	0	20	10	30	70	100	4
<b>PRACTICALS &amp; PROJECTS</b>											
7	BCS-451	Computer Organization & Introduction to Microprocessor	0	0	2	-	-	10	15	25	1
8	BCS-452	Design and Analysis of algorithms lab	0	0	2	-	-	10	15	25	1
9	BCS-454	Unix & Shell Programming Lab	0	0	2	-	-	10	15	25	1
10	GP-401	General Proficiency	-	-	-	-	-	25	-	25	1
<b>Total</b>			<b>17</b>	<b>6</b>	<b>6</b>			<b>220</b>	<b>430</b>	<b>650</b>	<b>26</b>

**STUDY & EVALUATION SCHEME**  
**B. Tech. Computer Science & Engineering**

**YEAR III, SEMESTER-V**

S. No.	Course Code	SUBJECT	PERIODS			Evaluation Scheme				SUBJECT TOTAL	Credits
						SESSIONAL EXAM.			E-SEM		
			L	T	P	CT	TA	TOTAL			
<b>THEORY</b>											
1	BCS-501	Theory of Computation	3	1	0	20	10	30	70	100	4
2	BCS-502	DBMS	3	1	0	20	10	30	70	100	4
3	BCS-503	OOPS with java	3	1	0	20	10	30	70	100	4
4	BCS-504	Software Engineering	3	1	0	20	10	30	70	100	4
5	BCS-505	Principles of Programming Language	2	1	0	10	5	15	35	50	2
		OE-I	2	1	0	10	5	15	35	50	2
<b>PRACTICAL/DESIGN/DRAWING</b>											
7	BCS-552	DBMS Lab	0	0	2	-	-	10	15	25	1
8	BCS-553	OOPS with java Lab	0	0	2	-	-	10	15	25	1
9	BCS-554	Software Engineering Lab	0	0	2	-	-	10	15	25	1
10	BCS-555	Seminar	0	0	2	-	-	25	-	25	1
11	GP-501	General Proficiency	-	-	-	-	-	25	-	25	1
<b>Total</b>			16	6	8	100	50	230	395	625	25

**OPEN ELECTIVE-I**

- BOE-501 Total Quality Management
- BOE-502 Human Computer Interaction
- BOE-503 Entrepreneurship Development
- BOE-504 Non-Conventional Energy Resources

**STUDY & EVALUATION SCHEME**  
**B. Tech. Computer Science & Engineering**

**YEAR III, SEMESTER-VI**

S. No.	Course Code	SUBJECT	PERIODS			Evaluation Scheme					Credits
						SESSIONAL EXAM.			E-SEM/ TOTAL		
			L	T	P	CT	TA	TOTAL			
<b>THEORY</b>											
1	BCS-601	Computer Networks	3	1	0	20	10	30	70	100	4
2	BCS-602	Computer Graphics	3	1	0	20	10	30	70	100	4
3	BCS-603	Compiler	3	1	0	20	10	30	70	100	4
4	BIT-601	Internet Technology	2	1	0	10	5	15	35	50	2
5		CS Elective-I	3	1	0	20	10	30	70	100	4
6		CS Elective-II	2	1	0	10	5	15	35	50	2
<b>PRACTICAL/DESIGN/DRAWING</b>											
6	BCS-651	Computer Networks Lab	0	0	2	-	-	10	15	25	1
7	BCS-652	Computer Graphics Lab	0	0	2	-	-	10	15	25	1
8	BCS-653	Compiler Lab	0	0	2	-	-	10	15	25	1
9	BIT-651	Internet Technologies Lab	0	0	2	-	-	10	15	25	1
10	GP-601	General Proficiency	-	-	-	-	-	25	-	25	1
<b>Total</b>			16	6	8	100	50	215	410	625	25

**CS ELECTIVE-I**

BIT-061 Software Testing  
BCS-061 Graph Theory  
BCS-062 System Programming  
BCS-063 Operational Research

**CS ELECTIVE-II**

BIT-062 Software project Management  
BCS-064 Pattern Recognition  
BCS-065 Parallel Algorithm  
BCS-066 Object Oriented Techniques

**STUDY & EVALUATION SCHEME**

**Integrated B. Tech.(CS ) & MBA**

**Year IV, Semester VII**

S. No.	Course Code	Subject	Period			Evaluation Scheme				Subject Total	Credits
						Sessional Exam.			E-SEM		
			L	T	P	CT	TA	TOTAL			
1	BCS-701	Computer Architecture	3	1	0	20	10	30	70	100	4
2	BCS-702	Artificial Intelligence	3	1	0	20	10	30	70	100	4
3	MBA-102	Market Science	4	1	0	20	10	30	70	100	4
4	MBA-104	Recording & Analysis of Business Operations	4	1	0	20	10	30	70	100	4
5	MBA-105	Micro Economics & Economic Planning	4	1	0	20	10	30	70	100	4
6	MBA-101	Management-Micro and Macro	4	1	0	20	10	30	70	100	4
7	BCS-751	Industrial Training viva-voce	0	0	2			0	0	25	1
8	GP-701	General Proficiency	-	-	-	-	-	-	-	25	1
<b>Total</b>			22	6	2	-	-	-	-	650	26

**STUDY & EVALUATION SCHEME**

**Integrated B. Tech.(CS ) & MBA**

**Year IV, Semester VIII**

**Course: MBA Full Time**

Sl. No.	Paper Code	Paper Name	L+T+P	Maximum marks			Credit
1	MBA201	Management Science	4+1+0	70	30	100	4
2	MBA202	Market Intelligence	4+1+0	70	30	100	4
3	MBA203	Identification, addition and delivery of Value	4+1+0	70	30	100	4
4	MBA204	Human Resource – Development	4+1+0	70	30	100	4
5	MBA205	Cases in Finance and Business Laws	4+1+0	70	30	100	4
6	MBA206	Event Management	4+1+0	70	30	100	4
<b>Total</b>				420	180	600	24

After 8th Semester, students will go for 8 weeks summer training compulsorily in Public Sector undertakings or Private Sector, known as Hands on Experience.

**STUDY & EVALUATION SCHEME**

**Integrated B. Tech.(CS ) & MBA**

**Year V, Semester IX**

Sl. No.	Paper Code	Paper Name	L+T+P	Maximum marks			Credit
1	MBA301	Strategies - Business, Marketing and HRM	4+1+0	70	30	100	4
2	MBA302	India at a Glance	4+1+0	70	30	100	4
3		Spec. Group 1 Paper 1	4+1+0	70	30	100	4
4		Spec. Group 1 Paper 2	4+1+0	70	30	100	4
5		Spec. Group 2 Paper 1	4+1+0	70	30	100	4
6		Spec. Group 2 Paper 2	4+1+0	70	30	100	4
7	MBA396	Hands on Experience Viva				100	2
		<b>Total</b>		<b>350</b>	<b>150</b>	<b>700</b>	<b>26</b>

Institutional Course (Qualifying in Nature) Aptitude (MBA498)

2 Hrs

2 Credit

**STUDY & EVALUATION SCHEME**

**Integrated B. Tech.(CS ) & MBA**

**Year V, Semester X**

**Course: MBA Full Time**

Sl. No.	Paper Code	Paper Name	L+T+P	Maximum marks			Credit
1		Spec. Group 1 Paper 3	4+1+0	70	30	100	4
2		Spec. Group 1 Paper 4	4+1+0	70	30	100	4
3		Spec. Group 1 Paper 5	4+1+0	70	30	100	4
4		Spec. Group 2 Paper 3	4+1+0	70	30	100	4
5		Spec. Group 2 Paper 4	4+1+0	70	30	100	4
6		Spec. Group 2 Paper 5	4+1+0	70	30	100	4
7	MBA496	Winter Project Viva		-	-	100	2
		<b>Total</b>		<b>420</b>	<b>180</b>	<b>700</b>	<b>26</b>

## List of Specializations

### **Specialization - 1: FINANCE**

MBA311: Banking operations Management  
MBA312: Central Banking  
MBA411: Capital Markets  
MBA412: Stock Exchange operations  
MBA413: Wealth Maximization

### **Specialization -2: MARKETING**

MBA316: Sales and Distribution  
MBA317: Service Management  
MBA416: CB and IMC  
MBA417: Rural Marketing  
MBA418: International Marketing

### **Specialization -3: HUMAN RESOURCE**

MBA421: Employee welfare and Labour Legislation  
MBA422: Training & Development and competency mapping  
MBA423: Performance Appraisal and compensation Management  
MBA321: Organizational Change and Development  
MBA322: Employee Engagements

### **Specialization -5: INFORMATION TECHNOLOGY**

MBA336: Managing IT-Enabled Services  
MBA337: Ecommerce  
MBA436: Business Intelligence and Data Mining  
MBA437: Information Technology Project Management  
MBA438: Data communication and Networking security

### **Specialization -7: OPERATIONS MANAGEMENT**

MBA346: Project Management  
MBA347: Decision Making in Innovation and New Product Development  
MBA446: Operation Strategy  
MBA447: Computer Integrated Manufacturing  
MBA448: Business Process Reengineering

### **Specialization -4: INTERNATIONAL BUSINESS**

MBA326: International Trade  
MBA327: EXIM Procedure & Documentation  
MBA426: Export-Import Financing  
MBA427: Global Business Environment  
MBA428: International Logistics

### **Specialization -6: HOSPITALITY & TOURISM**

MBA331: Service Sanitation and Risk  
MBA332: Hospitality and Tourism Planning  
MBA431: Travel agency and tour operators  
MBA432: Hospitality Information System  
MBA433: Recent trends in Hospitality and tourism

### **Specialization -8: RETAIL MANAGEMENT**

MBA341: Retail Management  
MBA342: Retail Pricing and Branding  
MBA441: International Retailing



MBA442: Merchandising and Mall Management

MBA443: Trends in Retailing

**Specialization -9: HEALTHCARE MANAGEMENT**

MBA351: Outdoor Health Management

MBA352: Management of Indore health

MBA451: Associated Services and Hygiene

MBA452: Hospital Layouts

MBA453: Recent trends in health care management

**Specialization -10: LEGAL ISSUES IN MODERN ERA**

MBA356: Patent and trade marks

MBA357: IPRs

MBA456: Cyber Law

MBA457: UN Charter and International court of Justice

MBA458: Business Adjudication

**Note: Students required to choose any two Specializations out of ten offering by the University. First Specialization chosen by student will be treated as Spec. Group 1 and second Specialization will be treated as Spec. Group 2.**