

Department of Computer Science and Engineering

Humanities & Social Science Courses

Program Name: B. Tech (CC)

BoS Approval date:

S. No.	Course Name	L	T	P	C
1.	Extra-curricular Activity (NSS / NCC / Scouting / Club Activity)	0	0	2	1
2.	Humanities II Engineering & Managerial Economics	3	1	0	4
TOTAL		3	1	2	5

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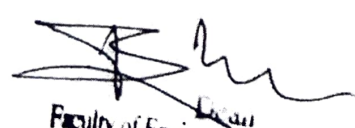
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Cross Cutting Courses List**Regulation: 2021**


Course Name	L	T	P	C
Professional Law and Ethics	3	0	0	3
English	2	0	0	2
Industrial Psychology	2	0	0	2
Industrial Sociology	2	0	0	2
Environmental science	3	0	0	0
Constitution of India	3	0	0	0
Total	15	0	0	9



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BCS-064 PHP	3	0	0	0	3
BCS-065 Linux Administration	3	0	0	0	3
Elective III	-	-	-	-	-
BCS-066 Software Project Management	3	0	0	0	3
BCS-067 Pattern Recognition	3	0	0	0	3
BCS-068 Parallel Algorithm	3	0	0	0	3
BCS-069 Internet Technology	3	0	0	0	3
BCS-070 Introduction to IoT	3	0	0	0	3
Elective IV	-	-	-	-	-
BCS-071 Embedded and Real Time Systems	3	0	0	0	3
BCS-072 Data Compression	3	0	0	0	3
BCS-073 Neural Networks	3	0	0	0	3
BCS-074 OS for Smart Devices (Android)	3	0	0	0	3
BCS-075 Client Server Computing	3	0	0	0	3
Elective V	-	-	-	-	-
BCS-076 Distributed Database	3	0	0	0	3
BCS-077 Software Quality Management	3	0	0	0	3
BCS-078 Simulation and Modeling	3	0	0	0	3
BCS-079 Unix and Shell Programming.	3	0	0	0	3

BCS-080 Digital Image Processing Elective VI	3	0	0	3
BCS-081 Computational Geometry	-	-	-	-
BCS-082 Computational Complexity	3	0	0	3
BCS-083 IT in Forensics Science	3	0	0	3
BCS-084 Advanced Computer Network	3	0	0	3
BCS-085 Big-Data Analysis Elective VII	3	0	0	3
BCS-086 Advanced Computer Architecture	-	-	-	-
BCS-087 Artificial Intelligence and Expert System	3	0	0	3
BCS-088 Data Warehouse and Mining	3	0	0	3
BCS-089 Distributed System	3	0	0	3
BCS-090 Python Elective VIII	3	0	0	3
BCS-091 Cryptography and Network Security	-	-	-	-
BCS-092 .NET Framework	3	0	0	3
BCS-093 Mobile Computing	3	0	0	3
BCS-094 Machine Learning	3	0	0	3
BCS-095 Speech and Natural Language Processing	3	0	0	3
Total	117	0	0	117


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Curriculum Analysis (Course Category)

Course: B.Tech. Artificial Intelligence

Regulation: 2021

Category	L	T	P	C
AECC (Ability Enhancement Competency Course)	5	1	28	20
Skill Enhancement Elective (SEE)	0	0	11	7
Discipline-Specific Course (DSC)	92	0	60	122
General Elective Course (GSC)	0	0	0	0
Cross-Cutting Course (CCC)	02	0	0	2
Discipline Specific Electives (DSE)	16	0	0	16
TOTAL	115	01	99	167

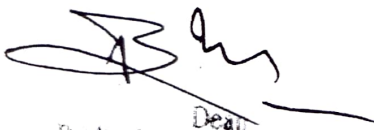


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AECC (Ability Enhancement Competency Course) List

Regulation: 2021

Course code	Course Name	L	T	P	C
ENG105	English Communication	2	1	0	3
MGT 103	Project Formulation and Appraisal	3	0	0	3
BCSAI 706	Mini Project	0	0	4	2
BCSAI 707	Campus Recruitment Training	0	0	4	2
BCSAI801	Industrial Training/Internship	0	0	20	10
	TOTAL	5	1	28	20



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Regulation: 2021

Course Code	Course Name	L	T	P	C
ENG113	Communications-I Lab	0	0	4	2
ENG 114	Business & Technical Communication (Lab)	0	0	4	2
BCSAI 512	Anandam - I (Happiness Curriculum)	0	0	1	1
BCSAI 612	Anandam - II (Happiness Curriculum)	0	0	1	1
BCSAI 708	Anandam - III (Happiness Curriculum)	0	0	1	1
	TOTAL	0	0	11	7



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Discipline Specific Course List

Regulation: 2021

Course Code	Course Name	L	T	P	C
BCSAI 102	Elements of Computing System	3	0	0	3
BCSAI 103	Programming in C	3	0	0	3
BCSAI 104	Computing Systems Lab	0	0	4	2
BCSAI 105	Programming in C Language Lab	0	0	4	2
BCSAI 201	Discrete Mathematics	3	0	0	3
BCSAI 202	Statistical Learning	3	0	0	3
BCSAI 203	Design Thinking	3	0	0	3
BCSAI 204	Operating System-Building Blocks	3	0	0	3
BCSAI 205	Digital Electronics	3	0	0	3
BCSAI 206	Digital Electronics Lab	0	0	4	2
BCSAI 207	Computer Aided Graphics & Drafting (Lab)	0	0	4	2
BCSAI 301	Computer Networks	3	0	0	3
BCSAI 303	Data Structures & Algorithms	3	0	0	3
BCSAI 304	Object Oriented Programming with Java	3	0	0	3
BCSAI 305	Cloud Computing	3	0	0	3
BzCSAI 306	Computational Systems Biology	2	0	0	2
BCSAI 307	Computer Networks Lab	0	0	4	2
BCSAI 308	Data Structures& Algorithms Lab	0	0	4	2
BCSAI 309	Object Oriented Programming with Java Lab	0	0	4	2
BCSAI 401	Design and Analysis of Algorithms	3	0	0	3
BCSAI 402	Robotic Operating Systems & Robot Simulation	3	0	0	3
BCSAI 403	Database Management System	3	0	0	3
BCSAI 404	Software Engineering	3	0	0	3
BCSAI 405	AI and Intelligent Agents	3	0	0	3
BCSAI 406	Database Management System with SQL Lab	0	0	4	2
BCSAI 407	Robotic Operating Systems & Robot Simulation (Lab)	0	0	4	2
BCSAI 408	Online Social Network Analysis Lab	0	0	4	2

BCSAI 409	Shell Scripting Lab	0	0	4	2
BCSAI 501	Ethics in Computer Science	3	0	0	3
BCSAI 502	Prolog Programming	3	0	0	3
BCSAI 503	Signal & Image Processing	3	0	0	3
BCSAI 504	Data Mining & ML	3	0	0	3
BCSAI 505	Formal Language & Automata	3	0	0	3
BCSAI 509	Data Mining & ML using Python Lab	0	0	4	2
BCSAI 510	Signal & Image Processing Lab	0	0	4	2
BCSAI 511	Prolog Programming Lab	0	0	4	2
BCSAI 601	Big Data Analytics	3	0	0	3
BCSAI 602	Compiler Design	3	0	0	3
BCSAI 603	Advanced Machine Learning	3	0	0	3
BCSAI 604	Natural Language Processing	3	0	0	3
BCSAI 605	Graphical Model	3	0	0	3
BCSAI 701	Fuzzy Logic & Application	3	0	0	3
BCSAI 702	Supervised & Unsupervised Learning	3	0	0	3
BCSAI 703	Online Machine Learning	3	0	0	3
BCSAI 704	R Programming	3	0	0	3
BCSAI 705	Fuzzy Logic & Application Lab	0	0	4	2
	Total	92	0	60	122



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General Elective Courses List

Regulation: 2020-21

Course Code	Course Name	L	T	P	C
	NIL	0	0	0	0
	Total	0	0	0	0

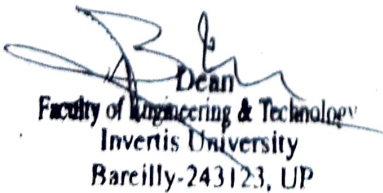


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Cross Cutting Courses List

Regulation: 2021

Course Code	Course Name	L	T	P	C
CHY103	Environmental Studies	2	0	0	2
	Total	2	0	0	2



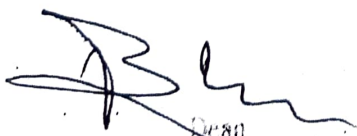
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Discipline-Specific Electives Courses List


Regulation: 2021

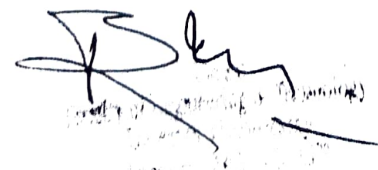
Course Code	Course Name	L	T	P	C
	Elective – I				
BCSAI 506	Information Security	2	0	0	2
BCSAI 507	Database Security	2	0	0	2
BCSAI 508	Business Intelligence	2	0	0	2
	Elective – II				
BCSAI 606	Blockchain	2	0	0	2
BCSAI 607	Internet of Things	2	0	0	2
BCSAI 608	Management information system	2	0	0	2
	Elective – III				
MGT 201	Orientation program in Entrepreneurship	2	0	0	2
MBA 204	Research Methodology	2	0	0	2
	TOTAL	16	0	0	16


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Skill Enhancement Elective Course List


Regulation: 2021

Sr. No.	Course Code	Course Name	L	T	P	C
1	BCS 301	Data Structures	2	1	0	3
2	BCS 351	Data structures Lab	0	0	4	2
3	BCS 302	IT Infrastructure Management	2	1	0	3
4	BCS 352	IT Infrastructure Management Lab	0	0	4	2
5	BCS 303	Digital Electronics	2	1	0	3
6	BCS 353	Digital Electronics Lab	0	0	4	2
7	BCS 304	Python	1	0	0	1
8	BCS 354	Python Lab	0	0	4	2
9	BCS 401	Computer Organization & Architecture	3	0	0	3
10	BCS 451	Computer Organization & Architecture Lab	0	0	4	2
11	BCS 402	Design and Analysis of Algorithms	3	0	0	3
12	BCS 452	Design and Analysis of Algorithms Lab	0	0	4	2
13	BCS 403	Operating Systems	3	0	0	3
14	BCS 453	Operating System Lab	0	0	4	2
15	BCS 404	Software Engineering	3	1	0	4
16	BCS 501	Formal Language and Automata Theory	3	0	0	3
17	BCS 502	Data Base Management System	3	0	0	3
18	BCS 552	DBMS Lab	0	0	4	2
19	BCS 503	Java Programming	2	0	0	2
20	BCS 553	Java Programming Lab	0	0	4	2
21	BCS 505	Introduction to Microprocessor	3	0	0	3
TOTAL			30	04	36	52


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Discipline Specific Course List

Regulation: 2021

Sr. No.	Course Code	Course Name	L	T	P	C
1	BEE 101	Basic Electrical Engineering	3	0	0	3
2	BEE 151	Basic Electrical Engineering Lab	0	0	4	2
3	BCE 101	Engineering Graphics and Design	1	0	0	1
4	BCE 151	Engineering Graphics and Design Lab	0	0	4	2
5	BCS 201	Programming For Problem-Solving	3	0	0	3
6	BCS 251	Programming For Problem-Solving Lab	0	0	4	2
7	BME 201	Workshop /Manufacturing Practices	1	0	0	1
8	BME 251	Workshop /Manufacturing Practices Lab	0	0	4	2
		Total	08	00	16	16


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General Elective Courses List

Regulation: 2020-21

Course Name	L	T	P	C
OPEN ELECTIVE - I	-	-	-	-
BOE-601 Total Quality Management	3	0	0	3
BOE-602 Human Computer Interaction	3	0	0	3
BOE-603 Entrepreneurship Development	3	0	0	3
BOE-604 Non-Conventional Energy Resource	3	0	0	3
BOE-605 Operational Research	3	0	0	3
OPEN ELECTIVE - II	-	-	-	-
BOE-701 Soft Skills and Interpersonal Communication	3	0	0	3
BOE-702 Cyber Laws and Ethics	3	0	0	3
BOE-703 Human Resource Development and Organizational Behaviour	3	0	0	3
BOE-704 Product Development	3	0	0	3
BOE-705 Queuing Theory and Modelling	3	0	0	3
Total	30	00	00	30


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