

# B.TECH.IT- BUSINESS INFORMATICS



## Constraints & Existing Framework

The proposed program is designed taking into consideration the current structure of flagship **B.Tech program** running at IITB with ordinance effective as on date;

- 1) The Program has to maintain it's core IT structure alongwith whatever was mandatory for a Technology Bachelor program.
  - a. *The first Semester has to be exactly same for all the branches and specializations.*
  - b. *The associated subjects as that of HSS & Basic Sciences has to be same to the extent possible.*
- 2) The program has an important pedagogical approach of '**Learning by Doing**' with Summer Internships beginning right from Second year. Thus Courses needs to be structured accordingly with identified Business / Industry participation.
- 3) Affiliations with international professional bodies (*Ex. AIB- Academy of International Business, IAU-International Association of Universities etc*) alongwith CEFR compliance for Foreign Languages (*German / French*) for compatibility and onward progression in international academic cooperation.
- 4) In view of recent developments in **Online Academic Contents** available the '**Blended Learning**' is being conceived as core principles of the Program pedagogy

### UG Curriculum

**Total Credit :160**

Semester 1 Total Credit :20					
SI.No.	Course Name	Code	Type	Credit	L-T-P
1	Physics		Hard	4	2-1-1
2	Linear Algebra		Hard	4	3-1-0
3	Introduction to Programming		Hard	4	2-1-1
4	Fundamental of Electrical and Electronics Engg.		Hard	4	2-1-1
5	Professional Communication		Hard	2	1-0-1
6	Principles of Management		Hard	2	1-1-0
					11-10-08
Total				20	29

Semester 2 Total Credit :24					
SI.No.	Course Name	Code	Type	Credit	L-T-P
1	Discrete Mathematical Structures		Hard	4	3-1-0
2	Univariate and Multivariate Calculus		Hard	4	3-1-0
	<b>Business Process Modeling</b>			<b>2</b>	1-1-0
3	Computer Organization and Architecture		Hard	4	2-1-1
4	Data Structures		Hard	4	2-1-1
5	Principles of Communication Engineering		Hard	4	2-1-1
6	Principle of Economics		Hard	2	2-0-0
					14-10-06
Total				<b>24</b>	30

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Semester 3 Total Credit :20+2					
SI.No.	Course Name	Code	Type	Credit	L-T-P
1	Probability and Statistics		Hard	4	3-1-0
2	Theory of Computation		Hard	4	2-1-1
3	Object oriented Methodologies		Hard	4	2-1-1
4	Operating System		Hard	4	2-1-1
5	Introduction to Finance		Hard	2	2-0-0
6	Introduction to Marketing		Hard	2	1-0-1
7	Foreign Language & Intercultural Studies*			2	
* can be floated in Semester 4 as well depending upon Students enrolments					12-08-08
Total				22	28

Semester 4 Total Credit :20+2					
SI.No.	Course Name	Code	Type	Credit	L-T-P
1	Design and Analysis of Algorithms		Hard	4	2-1-1
2	Principles of Programming Languages		Hard	4	2-1-1
3	Computer Networks		Hard	4	2-1-1
4	Software Engineering		Hard	4	2-1-1
5	Database Management System		Hard	4	2-1-1
6	Foundations of FinTech			2	1-1-0
					10-10-1020
Total				22	30

Semester 5 Total Credit :24					
SI.No.	Course Name	Code	Type	Credit	L-T-P
1	Computer Security		Hard	3	1-1-1
2	Business Informatics-I		Hard	3	1-1-1
3	Introduction to Machine Learning		Hard	4	2-1-1
4	Image and Video Processing (Elective)		Hard	4	2-1-1
5	Artificial Intelligence		Hard	4	2-1-1
6	Mini Project - I		Soft	4	0-1-3
					10-12-16
Summer Internship (Completed between Sem 4 and 5- evaluated in Sem 5)- 2 Credits					
Total				24	30(+8)

Semester 6 Total Credit <del>22</del> 18					
SI.No.	Course Name	Code	Type	Credit	L-T-P
1	Data Mining		Hard	4	2-1-1
2	Mini Project - II		Soft	4	0-1-5
3	Business Informatics-II		Soft	3	2-1-1
4	Business Analytics-I		Soft	3	2-1-1
5	International Business Operations		Soft	4	2-1-1
					08-10-18
Total				18	24(+12)

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Semester 7 Total Credit :16					
Summer Internship (Completed between Sem 6 and 7- evaluated in Sem 5) 2 Credits					
SI.No.	Course Name	Code	Type	Credit	L-T-P
1	Mini Project <b>Business Informatics - III</b>		Soft	8	0-1-7
2	Elective ( <b>Big Data Analytics</b> ) as mandatory for BI		Soft	4	2-1-1
3	Elective		Soft	4	2-1-1
Total				16	12(+16)

Semester 8 Total Credit :16					
SI.No.	Course Name	Code	Type	Credit	L-T-P
1	Project- <b>Business Informatics</b>		Soft	12	0-2-10
2	Elective		Soft	2	2-1-1
					02-06-22
Total				14	16(+24)

**Note:**

1. A candidate can earn maximum of 24 credits in any semester through regular registration.
2. Mini Projects grades shall not be counted against any specialization.
3. While choosing courses for elective, a minimum of 16 credits should be chosen from IT department ONLY.
4. **Business Informatics** courses often having smaller credits (1 or 2) may follow different evaluation and examination cycle compared to the courses with 3 or 4 credits.
5. **Business Informatics** courses will adapt 'Blended Learning' paradigm following 'Harvard Case study' based approach and would require necessary preparations.

At didactic level, the **Business Operations** assumes special significance and this would be endeavored to have leading experts and practitioners for taking sessions in the Operations Track with "Harvard Case study" based approach appropriately integrating management theory and practice.

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