



A CMI INSTITUTION

CHRIST COLLEGE OF ENGINEERING (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS

CURRICULUM

2026 REGULATION



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CHRIST COLLEGE OF ENGINEERING (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS CURRICULUM 2026 REGULATION

Approved by BoS meeting held on: 16-06-2026

Approved by Academic Council meeting held on: 23-06-2026


BoS Chairperson

Dr. Divya R.
CHAIRPERSON
Board of Studies
B.Tech Computer Science &
Business Systems
Christ College of Engineering
(Autonomous)
Irinjalakuda, Kerala


Director of Academics

Dr. Manoj George


Principal

Dr. Solomon P.A

(College seal)



Programme Structure

Semester (Credits)	S1	S2	S3	S4	S5	S6	S7	S8	Total	%
Humanities and Social Science Course including Management Course (HM)		3	3		2	6	2		16	9.58
Basic Science Course (BS)	11	10	1	5					27	16.17
Engineering Science Course (ES)	9	1		2					12	7.19
Programme Core Courses (PC)		8	16	15	14	4	6		63	37.72
Professional Elective Course (PE)					4	7	8		19	11.38
Open Elective Course (OE)						3	3		6	3.6
Skill Enhancement Course (SE)			2						2	1.197
Project/ Internship (PR/IP)					3	2	3	12	20	11.976
Mandatory Course (MC) (Environmental Science, Induction program, Indian Constitution, Essence of Indian Knowledge Tradition)	2								2	1.197
Total	22	22	22	22	23	22	22	12	167[#]	100
Minor	0	0	4	4	4	4	0	0	16	
Honour	0	0	0	4	4	4	4	0	16	

Additional 3 Credits from Activity points

Course Distribution by Semester and Type

Sl. No.	Course Type	Number of Courses								Total
		S1	S2	S3	S4	S5	S6	S7	S8	
1	Humanities and Social Science Course including Management Course (HM)		1	1		1	2	1		6
2	Basic Science Course (BS)	4	3	1	2					10
3	Engineering Science Course (ES)	3	1		1					5
4	Programme Core Courses (PC)		2	4	5	5	2	3		21
5	Professional Elective Course (PE)					1	2	2		5
6	Open Elective Course (OE)						1	1		2
7	Skill Enhancement Course (SE)			1						1
8	Project/ Internship (PR/IP)					1	1	1	1	4
9	Mandatory Course (MC)	1	2	1	1					5

COURSE CODE FORMAT GUIDELINES

Each course in the curriculum shall be identified by a unique nine-character alphanumeric code structured as follows:

1. First Letter - Department Code

Indicates the parent department:

- C - Civil Engineering
- M - Mechanical Engineering
- E - Electrical and Electronics Engineering
- L - Electronics and Communication Engineering
- V - VLSI
- R - Computer Science and Engineering
- B - Computer Science and Business Systems
- D - Computer Science and Engineering (Data Science)

2. Second and Third Letters - Curriculum Scheme Year

Represents the year in which the curriculum scheme was introduced (e.g., 26 for 2026).

3. Fourth and Fifth Letters - Abbreviation of Course Title

Two-letter short form of the course title (e.g., MA for Mathematics, DS for Data Structures).

4. Sixth Letter - Course Type Indicator

Denotes the nature of the course:

- T - Theory
- P - Practical
- E - Lab Embedded
- R - Project

5. Seventh Character - Semester Number

Indicates the semester in which the course is offered (e.g., 1 for Semester I).

6. Eighth and Ninth Characters - Course Sequence Number

Represents the order of the course in that semester (e.g., 21 for the 21st course).

Example:

B26DST203

- B – Computer Science and Business Systems
- 26 - Curriculum Revision 2026
- DS – Data Structures
- T - Theory Course
- 2 - Offered in Semester II
- 03 – 3rd Course in that semester

FIRST SEMESTER: Computer Science and Business Systems														
10 Days Compulsory Induction Program														
Sl. No:	S l o t	Course Code	Course Type	Course Category	Course Title (Course Name)	Credit Structure				SS	Total Marks		Credits	Hrs./Week
						L	T	P	R		CIA	ESE		
THEORY														
1	A	G26LAT101	BS	GC	Linear Algebra	3	0	0	0	4.5	40	60	3	3
2	B	G26PHE112	BS	GC	Modern Engineering Physics	3	0	2	0	5.5	40	60	4	5
3	C	G26IST103	BS	GC	Introductory Topics in Statistics and Probability	3	0	0	0	4.5	40	60	3	3
4	D	G26ELT108	ES	GC	Basics of Electrical and Electronics Engineering	4	0	0	0	6.0	40	60	4	4
5	E	B26FPE105	ES	GC	Fundamentals of Programming	2	1	2	0	4.5	40	60	4	5
PRACTICALS														
6	G	G26EWP112	ES	GC	Electrical and Electronics Workshop Practice	0	0	2	0	1	50	50	1	2
7	H	B26BCP106	BS	CC	Business Communication & Value Science - I	0	0	2	0	1	50	-	1	2
MANDATORY COURSES														
8	I	B26IKT108	MC	CC	Indian Knowledge System	2	0	0	0	3	40	60	2	2
9	-	A26APP115	MC	CC	Activity Point Programme									
Total										30			22	26

- L-T-P-R = Lecture – Tutorial – Practical - Project
- SS (Self Study) Hours = $1.5*L + 0.5*T + 0.5*P + R$
- CIA = Continuous Internal Assessment, and ESE = End Semester Examination

***Assessment method:** Cambridge English language assessment Lingua skill General – B1 Preliminary/British council (General - B1) Aptis test assessment Range (43-58)

§Activity Points: Students are required to acquire a minimum of 120 activity points, with at least 40 points per group, to fulfil the curriculum requirement of 3 activity credits. At the end of 6th semester, the students are required to earn the minimum number of activity points from the AICTE mandated activity point programme to qualify for the award of B. Tech degree.

SECOND SEMESTER: Computer Science and Business Systems														
Sl. No:	S l o t	Course Code	Course Type	Course Category	Course Title (Course Name)	Credit Structure				SS	Total Marks		Credits	Hrs./ Week
						L	T	P	R		CIA	ESE		
THEORY														
1	A	B26DMT201	BS	GC	Discrete Mathematics	3	1	0	0	5	40	60	4	4
2	B	B26SME202	BS	GC	Statistical Methods	3	0	2	0	5.5	40	60	4	5
3	C	B26DSE203	PC	PC	Data Structures & Algorithms	3	0	2	0	5.5	40	60	4	5
4	D	B26FET204	HM	PC	Fundamentals of Economics	3	0	0	0	4.5	40	60	3	3
5	E	B26ELT205	BS	CC	English Language Course	2	0	0	0	3	100	-	2	2
6	F	B26SET207	PC	PC	Software Engineering	2	0	0	0	3	40	60	2	2
7	G	G26ATE110	ES	CC	Algorithmic Thinking with Python	2	0	2	0	4	40	60	3	4
MANDATORY COURSES														
8	H	B26EIT208	MC	CC	Essence of Indian Traditional Knowledge	2	0	0	0	3	40	60	Pass /Fail	2
9	I	B26UHT209	MC	CC	Universal Human Values	2	0	0	0	3	50	50	Pass /Fail	2
10	-	A26APP215	MC	CC	Activity Point Programme									
Total										36.5			22	29

THIRD SEMESTER: Computer Science and Business Systems														
Sl. No:	S l o t	Course Code	Course Type	Course Category	Course Title (Course Name)	Credit Structure				SS	Total Marks		Credits	Hrs./Week
						L	T	P	R		CIA	ESE		
THEORY														
1	A	B26FLT301	PC	PC	Formal Languages and Automata Theory	3	1	0	0	5	40	60	4	4
2	B	B26DME302	PC	PC	Database Management Systems	3	0	2	0	5.5	40	60	4	5
3	C	B26OOE303	PC	PC	Object Oriented Programming	2	1	2	0	4.5	40	60	4	5
4	D	B26SDE304	PC	PC	Software Design with UML	3	0	2	0	5.5	40	60	4	5
5	E	B26DTP305	SE	CC	Design Thinking	0	0	4	0	5	100	-	2	4
6	F	B26FMT306	HM	PC	Fundamentals of Management and Business Strategy	3	0	0	0	4.5	40	60	3	3
PRACTICALS														
7	G	B26BCP307	BS	CC	Business Communication & Value Science – II	0	0	2	0	1	50	-	1	2
MANDATORY COURSES														
8	H	B26ICT308	MC	CC	Indian Constitution	2	0	0	0	3	50	-	Pass/Fail	2
9	-	A26APP311	MC	CC	Activity Point Programme ^s									
VALUE ADDED COURSES														
10	M	-	VA	CC	Minor Course	3	1	0	0	5			4	4
Total										31/36*			22/26*	30/34*

FOURTH SEMESTER: Computer Science and Business Systems															
Sl. No:	S l o t	Course Code	Course Type	Course Category	Course Title (Course Name)	Credit Structure				SS	Total Marks		Credits	Hrs./Week	
						L	T	P	R		CIA	ESE			
THEORY															
1	A	B26OSE401	PC	PC	Operating Systems	3	0	2	0	5.5	40	60	4	5	
2	B	B26DAE402	PC	PC	Design And Analysis of Algorithms	3	0	2	0	5.5	40	60	4	5	
3	C	B26AIT403	PC	PC	Artificial Intelligence	3	0	0	0	4.5	40	60	3	3	
4	D	B26COT404	PC	PC	Computer Organization	2	0	0	0	3	40	60	2	2	
5	E	B26CSE405	BS	GC	Computational Statistics	3	0	2	0	5.5	40	60	4	5	
6	F	B26IPT406	ES	UC	Introduction to Innovation, IP Management & Entrepreneurship	2	0	0	0	3	40	60	2	2	
PRACTICALS															
7	G	B26IDP407	PC	PC	Introduction to DevOps	0	0	4	0	2	50	50	2	4	
8	H	B26BCP408	BS	CC	Business Communication & Value Science – III	0	0	2	0	1	50	-	1	2	
MANDATORY COURSES															
9	I	B26EST409	MC	CC	Environmental Sciences	2	0	0	0	3	50	-	Pass/Fail	2	
10	-	A26APP412	MC	CC	Activity Point Programme\$								0	-	
VALUE ADDED COURSES															
11	M	-	VA	CC	Minor/Honour Course	3	1	0	0	5	40	60	4	4	
Total										33/38*			22/26	30/34*	

FIFTH SEMESTER: Computer Science and Business Systems															
Sl. No:	Slot	Course Code	Course Type	Course Category	Course Title (Course Name)	Credit Structure				SS	Total Marks		Credits	Hrs./Week	
						L	T	P	R		CIA	ESE			
THEORY															
1	A	B26CNE501	PC	PC	Computer Networks	2	0	2	0	4	40	60	3	4	
2	B	B26MLE502	PC	PC	Machine Learning	3	0	2	0	5.5	40	60	4	5	
3	C	B26CME503	PC	PC	Cloud, Microservices & Application	2	0	2	0	4	40	60	3	4	
4	D	B26ITE504	PC	PC	IT Project Management	2	0	2	0	4	40	60	3	4	
5	E	B26FCT505	HM	PC	Finance and Cost Accounting	2	0	0	0	3	40	60	2	2	
6	F	B26PE15XX	PE	PE	Professional Elective I	3	0	2	0	5.5	40	60	4	5	
PRACTICALS															
7	G	B26MWP506	PC	PC	Modern Web Applications	0	0	2	0	1	50	-	1	2	
8	H	B26MPR507	PR	PR	Mini Project	0	0	0	3	3	50	50	3	3	
MANDATORY COURSES															
9	-	A26APP511	MC	CC	Activity Point Programme ^{\$}								-	-	
VALUE ADDED COURSES															
10	M	-	VA	CC	Minor/Honour Course	3	1	0	0	5	40	60	4	4	
Total										30/35*			23/27*	29/33*	

SIXTH SEMESTER: Computer Science and Business Systems															
Sl. No:	S l o t	Course Code	Cou rse Typ e	Cou rse Cate gory	Course Title (Course Name)	Credit Structure				SS	Total Marks		Credi ts	Hrs./ Week	
						L	T	P	R		CIA	ESE			
THEORY															
1	A	B26ISE601	PC	PC	Information Security	2	0	2	0	4	40	60	3	4	
2	B	B26ORE602	HM	PC	Operational Research	2	0	4	0	5	40	60	4	6	
3	C	B26FMT603	HM	PC	Fundamentals of Marketing	2	0	0	0	3	40	60	2	2	
4	D	B26PE26XX	PE	PE	Professional Elective II	3	0	2	0	5.5	40	60	4	5	
5	E	B26PE36XX	PE	PE	Professional Elective III	3	0	0	0	4.5	40	60	3	3	
6	F	B26OE16XX	OE	OE	Open Elective I	3	0	0	0	4.5	40	60	3	3	
PRACTICALS															
7	G	B26CPR607	PR	PR	Capstone Project Stage I	0	0	0	4	4	50	50	2	4	
8	H	B26BAP608	PC	PC	Business Analytics using Python	0	0	2	0	1	50	-	1	2	
MANDATORY COURSES															
9	-	A26APP615	MC	CC	Activity Point Programme ^{\$}								-	-	
VALUE ADDED COURSES															
10	M	-	VA	CC	Minor/ Honour Course	3	1	0	0	5			4	4	
Industrial Visit (Maximum 12 Days are permitted, not exceeding 6 working days)															
Total										31.5/ 36.5*			22/ 26*	29/ 33*	

Open Electives are such courses which will be offered for other departments. Like CSBS department students have to opt open electives from CE/EEE/CS/CSDS/CSBS/ECE/VLSI/ME/EEE departments.

SEVENTH SEMESTER: Computer Science and Business Systems														
Sl. No:	S l o t	Course Code	Cour se Type	Cou rse Cate gory	Course Title (Course Name)	Credit Structure				SS	Total Marks		Credi ts	Hrs. /We ek
						L	T	P	R		CIA	ESE		
THEORY														
1	A	B26UDE701	PC	PC	Usability Design of Software Applications	1	0	2	0	2.5	40	60	2	3
2	B	B26SST702	PC	PC	Services Science and Service Operational Management	3	0	0	0	4.5	40	60	3	3
3	C	B26HRT703	HM	PC	Human Resource Management	2	0	0	0	3	40	60	2	2
4	D	B26OE27XX	OE	OE	Open Elective II	3	0	0	0	4.5	40	60	3	3
5	E	B26PE47XX	PE	PE	Professional Elective IV	3	0	2	0	5.5	40	60	4	5
6	F	B26PE57XX	PE	PE	Professional Elective V	3	0	2	0	5.5	40	60	4	5
PRACTICALS														
7	G	B26CPR707	PR	PR	Capstone Project Phase- II	0	0	0	6	6	100	-	3	6
8	I	B26DVP708	PC	PC	Data Visualization and Dashboarding	0	0	2	0	1	50	-	1	2
VALUE ADDED COURSES														
9	H	-	VA	CC	Honour Course	3	1	0	0	5			4	4

Total						32.5/37.5*		22/26*	29/33*
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EIGHTH SEMESTER: Computer Science and Business Systems														
Sl. No:	Slot	Course Code	Course Type	Course Category	Course Title (Course Name)	Credit Structure				SS	Total Marks		Credits	Hrs./Week
						L	T	P	R		CIA	ESE		
THEORY														
1	A	B26INR801	IP	IP	Internship	0	0	24	0	12	100	0	12	-
VALUE ADDED COURSES														
2	H	-	VA	UC	Project: Honours Course	0	0	0	4	4			4	4
Total										12/16*			12/16*	4*

Professional Elective 1

1. B26PE1501: Data Mining and Analytics
2. B26PE1502: Image processing and pattern recognition
3. B26PE1503: Advanced Social, Text and Media Analytics
4. B26PE1504: Object Oriented Programming in Java

Professional Elective 2

1. B26PE2601: Natural Language Processing
2. B26PE2602: Cloud Computing
3. B26PE2603: Introduction to IoT and Industrial Systems
4. B26PE2604: Digital Twin Technology

Professional Elective 3

1. B26PE3605: Research for Managerial Decisions
2. B26PE3606: Organizational Behaviour
3. B26PE3607: Ethics, Governance, and Corporate Responsibility
4. B26PE3608: Information Systems for Managers

Professional Elective 4

1. B26PE4701: Full Stack Web Development
2. B26PE4702: Mobile Application Development
3. B26PE4703: Cognitive Science and Analysis
4. B26PE4704: Deep Learning

Professional Elective 5

1. B26PE5705: Robotics and Embedded Systems
2. B26PE5706: Generative AI and Large Language Models
3. B26PE5707: Data Engineering
4. B26PE5708: Quantum Computation and Quantum Information

Open Elective 1

1. B26OE1601: Computer Vision
2. B26OE1602: Client Server Architecture

Open Elective 2

1. B26OE2701: Data Compression Techniques
2. B26OE2702: Compiler Design

SEMESTER 3 & 4**Minor course Baskets**

Basket 1	Artificial Intelligence and Machine Learning
Basket 2	Business Analytics and Digital Management
Basket 3	Networking and Security

BASKET 1 - MINOR IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
LIST OF NPTEL COURSES

	Course Name	Duration	Credit	Link
ODD SEM	Artificial Intelligence: Concepts and Techniques	12 weeks	4	https://nptel.ac.in/courses/106108705
	Artificial Intelligence: Foundations and Algorithms	12 weeks	4	https://nptel.ac.in/courses/106102220
<u>EVEN SEM</u>	Deep Learning	12 weeks	4	https://onlinecourses.nptel.ac.in/noc26_cs66/preview
	Natural Language Processing	12 weeks	4	https://onlinecourses.nptel.ac.in/noc26_cs45/preview

BASKET 2 - MINOR IN BUSINESS ANALYTICS AND DIGITAL MANAGEMENT

	Course Name	Duration	Credit	Link
ODD SEM	Management Information System	12 weeks	4	https://nptel.ac.in/courses/110105148
	Business to Business Marketing (B2B)	12 weeks	4	https://nptel.ac.in/courses/110107168
<u>EVEN SEM</u>	Business Analytics and Data Mining Modeling using R	12 weeks	4	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_mg64
	Business Intelligence & Analytics	12 weeks	4	https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_cs64

BASKET 3 - MINOR IN NETWORKING AND SECURITY

	Course Name	Duration	Credit	Link
ODD SEM	Computer Networks	12 weeks	4	https://onlinecourses.nptel.ac.in/noc26_cs66/preview
	Cyber Security and Privacy	12 weeks	4	https://onlinecourses.nptel.ac.in/noc26_cs45/preview
<u>EVEN SEM</u>	Cryptography and Network Security	12 weeks	4	https://onlinecourses.nptel.ac.in/noc26_cs57/preview
	Blockchain and its Applications	12 weeks	4	https://onlinecourses.nptel.ac.in/noc26_cs34/preview

