



**School of Engineering & Technology**  
**B. Tech Computer Science & Engineering [For New Students (Session 2022-23)]**

Credit Definition

Type	Duration (in Hour)	Credit
Lecture (L)	1	1
Tutorial (T)	1	1
Practical (P)	2	1

Total Credit

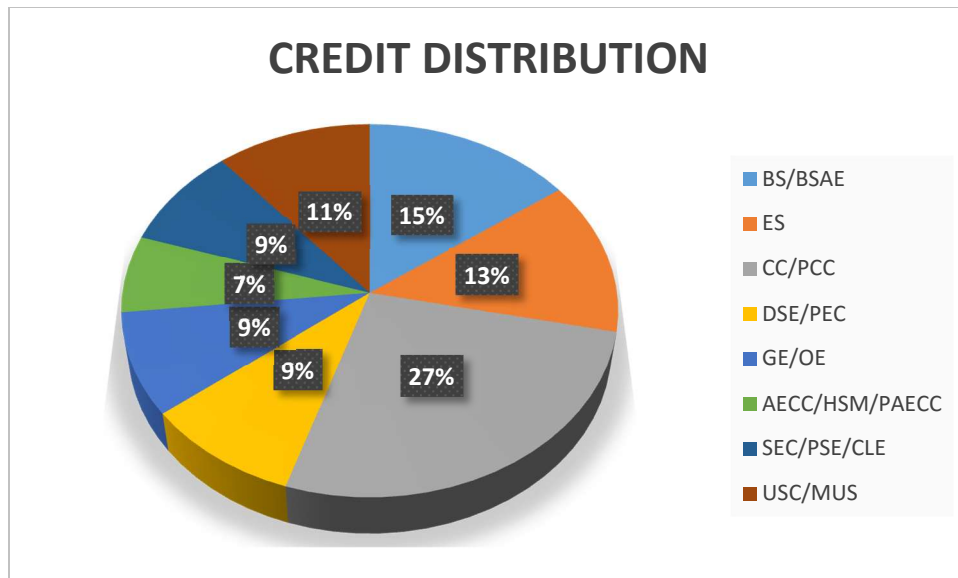
Year	Semester	hrs./Week	Credit
1 <sup>st</sup>	1 <sup>st</sup>	28	25
	2 <sup>nd</sup>	28	24
2 <sup>nd</sup>	3 <sup>rd</sup>	28	24
	4 <sup>th</sup>	28	24
3 <sup>rd</sup>	5 <sup>th</sup>	27	25
	6 <sup>th</sup>	26	25
4 <sup>th</sup>	7 <sup>th</sup>	14	17
	8 <sup>th</sup>	7	16
<b>Total</b>			<b>180</b>

Category Codification with Credit Break up

Definition of Category	Category	No	Credit
Basic Science	<b>BS/BSAE</b>	1	27
Engineering Science	<b>ES</b>	2	24
Professional Core	<b>CC/PCC</b>	3	48
Professional Elective (Discipline Specific)	<b>DSE/PEC</b>	4	17
Open Elective (General Elective)	<b>GE/OE</b>	5	16
Humanities & Social Science including Management	<b>AECC/HSM/PAECC</b>	6	12
Project Work / Seminar / Internship / Entrepreneurship	<b>SEC/PSE/CLE</b>	7	16
Mandatory / University Specified (Environmental Sc. / Induction Training / Indian Constitution / Foreign language)	<b>USC/MUS</b>	8	20
<b>Total</b>			<b>180</b>

**School of Engineering & Technology**  
**B. Tech Computer Science & Engineering**

**Category wise Credit Distribution**



**SEMESTER: I**

**Mandatory Induction Program – Duration 3 weeks**

- Physical Activity
- Creative Arts
- Universal Human Values
- Literary
- Proficiency Modules
- Lectures by Eminent People
- Visits to Local Areas
- Familiarization to Department/Branch & Innovations



**School of Engineering & Technology**  
**B. Tech Computer Science & Engineering**

Sl No	Course Title	Code	Credit	Type		
				L	T	P
1	Discrete Mathematics	7000011101	3	3	0	0
2	Engineering Physics	7000011102	3	3	0	0
3	Fundamentals of Computer Science & Problem Solving	8000011101	4	4	0	0
4	Principles of Electrical Engineering	8000011102	4	4	0	0
5	Communicative English	4000011101	2	2	0	0
6	Environmental Science	7000011103	2	2	0	0
7	Engineering Physics Lab	7000011201	1	0	0	2
8	Fundamentals of Computer Science & Problem Solving Lab	8000011201	1	0	0	2
9	Principles of Electrical Engineering Lab	8000011202	1	0	0	2
10	Foreign Language - I	6000011101	2	2	0	0
11	Professional Training-I: (Aptitude)	6000011401	2	2	0	0
<b>Total Credit (Theory:07, Practical:03, Sessional:01)</b>			<b>25</b>	<b>28 (hrs./Week)</b>		

**SEMESTER: II**

Sl No	Course Title	Code	Credit	Type		
				L	T	P
1	Linear Algebra and Vectors	7000012104	3	3	0	0
2	Programming and Data Structures	8000012103	4	4	0	0
3	Digital Logic	8000012104	4	4	0	0
4	Biology for Engineers	7000012105	2	2	0	0
5	Engineering Chemistry	7000012106	3	3	0	0
6	Programming and Data Structures Lab	8000012203	1	0	0	2
7	Digital Logic Lab	8000012204	1	0	0	2
8	Engineering Drawing & Workshop	7000012202	1	0	0	2
9	LBS-I: (Linear Algebra)	8000012205	1	0	0	2
10	Foreign Language - II	6000012102	2	2	0	0
11	Professional Training-II: (Aptitude)	6000012402	2	2	0	0
<b>Total Credit (Theory:06, Practical:04, Sessional:01)</b>			<b>24</b>	<b>28 (hrs./Week)</b>		



**School of Engineering & Technology**  
**B. Tech Computer Science & Engineering**

**SEMESTER: III**

Sl No	Course Title	Code	Credit	Type		
				L	T	P
1	Operation Research	7000013107	3	3	0	0
2	Data Structure & Algorithm	1000013101	4	4	0	0
3	Object Oriented Programming through C++	1000013102	3	3	0	0
4	Computer Organization and Architecture	1000013103	4	4	0	0
5	Economics for Engineers	4000013102	2	2	0	0
6	Data Structure & Algorithm Lab	1000013201	1	0	0	2
7	Object Oriented Programming Lab through C++	1000013202	1	0	0	2
8	Computer Organization and Architecture Lab	1000013203	1	0	0	2
9	LBS-II: (Operation Research)	8000013206	1	0	0	2
10	Foreign Language - III	6000013103	2	2	0	0
11	Professional Training-III: (Aptitude)	6000013403	2	2	0	0
<b>Total Credit (Theory:06, Practical:04, Sessional:01)</b>			<b>24</b>	<b>28 ( hrs./Week)</b>		

**SEMESTER: IV**

Sl No	Course Title	Code	Credit	Type		
				L	T	P
1	Probability for Computer Science	7000014108	3	3	0	0
2	Operating Systems	1000014104	3	3	0	0
3	Design and Analysis of Algorithm	1000014105	4	4	1	0
4	Database Management System	1000014106	4	4	0	0
5	Financial Management	4000014103	2	2	0	0
6	Operating Systems Lab	1000014204	1	0	0	2
7	Design and Analysis of Algorithm Lab	1000014205	1	0	0	2
8	Database Management System Lab	1000014206	1	0	0	2
9	LBS-III: (Python)	8000014207	1	0	0	2
10	Foreign Language - IV	6000014104	2	2	0	2
11	Professional Training-IV: (Aptitude)	6000014404	2	2	0	2
<b>Total Credit (Theory:06, Practical:04, Sessional:01)</b>			<b>24</b>	<b>28 ( hrs./Week)</b>		



**School of Engineering & Technology**  
**B. Tech Computer Science & Engineering**

**SEMESTER: V**

SI No	Course Title	Code	Credit	Type		
				L	T	P
1	Statistical Modelling	7000015109	3	3	0	0
2	Formal Language and Automata Theory	1000015107	3	3	0	0
3	Artificial Intelligence	1000015108	3	3	1	0
4	Software Engineering	1000015109	4	4	0	0
5	Elective - I (Open)	3000015101	4	4	1	0
6	Entrepreneurship Skill	4000015104	2	2	0	0
7	Artificial Intelligence Lab	1000015207	1	0	0	2
8	Software Engineering Lab	1000015208	1	0	0	2
9	LBS-IV: (Statistical Modelling)	8000015208	1	0	0	2
10	Term Paper	5000015601	1	0	0	2
11	Professional Training-V: (Core Java)	6000015405	2	2	0	0
<b>Total Credit (Theory:06, Practical:03, Sessional:02)</b>			<b>25</b>	<b>27 ( hrs./Week)</b>		

Elective I (Open)		
SI No.	Paper Code	Paper Name
1.		Microprocessor and Microcontroller
2.		Analog and Digital Communication

**SEMESTER: VI**

SI No	Course Title	Code	Credit	Type		
				L	T	P
1	Compiler Design	1000016110	3	3	0	0
2	Computer Networks	1000016111	3	3	0	0
3	Elective – II (Open)	3000016102	4	4	0	0
4	Elective – I (Professional)	2000016101	3	3	0	0
5	Elective – II (Professional)	2000016102	3	3	0	0
6	Desugn Thinking	4000016105	2	2	0	0
7	Compiler Design Lab	1000016209	1	0	0	2
8	Computer Networks Lab	1000016210	1	0	0	2
9	Elective – II (Professional) Lab	2000016201	1	0	0	2
10	Project – I	5000016501	2	0	0	0
11	Professional Training-VI: (Java Script)	6000016406	2	0	0	2
<b>Total Credit (Theory:06, Practical:03, Sessional:02)</b>			<b>25</b>	<b>26 ( hrs./Week)</b>		



**School of Engineering & Technology**  
**B. Tech Computer Science & Engineering**

<b>Elective II (Open)</b>		
<b>Sl No.</b>	<b>Paper Code</b>	<b>Paper Name</b>
1.		Fuzzy Set Theory And Decision Making
2.		Robotics
<b>Elective – I (Professional)</b>		
<b>Sl No.</b>	<b>Paper Code</b>	<b>Paper Name</b>
3.		Digital Signal Processing
4.		Cryptography and Network Security
5.		Advanced Architecture
6.		Artificial Neural Network
<b>Elective – II (Professional)</b>		
7.		Digital Image Processing
8.		Embedded System
9.		Machine Learning

**SEMESTER: VII**

<b>Sl No</b>	<b>Course Title</b>	<b>Code</b>	<b>Credit</b>	<b>Type</b>		
				<b>L</b>	<b>T</b>	<b>P</b>
1	Elective-III (Open)	3000017103	4	4	0	0
2	Elective- III (Professional)	2000017103	3	3	0	0
3	Elective- IV (Professional)	2000017104	3	3	0	0
4	Constitution of India	4000017106	2	2	0	0
5	Elective- IV (Professional) Lab	2000017202	1	0	0	2
6	Project-II	5000017502	4	0	0	0
<b>Total Credit (Theory:04, Practical:01, Sessional:01)</b>			<b>17</b>	<b>14 ( hrs./Week)</b>		

<b>Elective III (Open)</b>		
<b>Sl No.</b>	<b>Paper Code</b>	<b>Paper Name</b>
1.		Fibre Optic communication
2.		Cyber Law
3.		Web Technology
<b>Elective – III (Professional)</b>		
<b>Sl No.</b>	<b>Paper Code</b>	<b>Paper Name</b>
4.		Bioinformatics
5.		Cloud Computing
6.		Data Mining
7.		Internet of Things
<b>Elective – IV (Professional)</b>		
8.		Soft Computing
9.		Natural Language Processing
10.		Distributed Database System



**School of Engineering & Technology**  
**B. Tech Computer Science & Engineering**

**SEMESTER: VIII**

SI No	Course Title	Code	Credit	Type		
				L	T	P
1	Elective- IV (Open)	3000018104	4	3	1	0
2	Elective- V (Professional)	2000018105	3	3	0	0
3	Project-III	5000018503	6	0	0	0
4	Comprehensive Viva	5000018602	3			
<b>Total Credit (Theory:02, Practical:00 , Sessional:01)</b>			<b>16</b>	<b>7 ( hrs./Week)</b>		

<b>Elective IV (Open)</b>		
SI No.	Paper Code	Paper Name
1.		Business Analytics/Design Thinking
2.		Satellite Communication
<b>Elective- V (Professional)</b>		
SI No.	Paper Code	Paper Name
3.		Data Science
4.		Wireless and Sensor Network
5.		Mobile Computing
6.		Block Chain and Crypto Currency