

**B.Tech (Computer Engineering)**

Semester	1	2	3	4	5	6	7	8	Discipline /NSS	Credits	CH	IC	PC	PE	OE	Total
I & II									1	<b>45</b>		45				<b>45</b>
III	HS-200 Social Science and Economics 2	CP-221 Logic System Design (3-0-0) 3	CP-223 Data Structures (3-0-0) 3	CP-225 Probability and Statistics (3-0-0) 3	CP-227 Abstract Algebra (3-0-0) 3	CP-251 LSD Lab (0-0-3) 2	CP-253 Data Structure Lab (0-0-3) 2	Open Elective I 4		<b>22</b>		2	16		4	<b>22</b>
IV	CP-222 DBMS (3-0-0) 3	CP-224 Microprocessor and Microcontrollers (3-0-0) 3	CP-226 Computer Architecture (3-0-0) 3	CP-228 Theory of Computation (3-1-0) 4	CP-250 DBMS Lab (0-0-3) 2	CP-252 Assembly Language Programming Lab (0-0-3) 2	Open Elective II 4	Creative Arts/ Sports/ NSS/ Hindi 1	Discipline 1	<b>23</b>		2	17		4	<b>23</b>
V	CP-321 Operating System (3-0-0) 3	CP-323 Compiler Design (3-0-0) 3	CP-325 Computer Network (3-0-0) 3	CP-351 OS Lab (0-0-3) 2	CP-353 System Programming Lab (0-0-3) 2	CP-355 Network Programming Lab (0-0-3) 2	Program Elective I 4	Open Elective III 4		<b>23</b>			15	4	4	<b>23</b>
VI	CP-322 Software Engg. (3-0-0) 3	CP-324 Design and Analysis of Algorithms (3-0-0) 3	CP-350 Free and Open Source Lab (0-1-3) 3	CP-352 Algorithms Lab (0-0-3) 2	CP-354 Seminar (0-3-0) 3	Program Elective II 4	Open Elective IV 4		Discipline 1	<b>23</b>		1	14	4	4	<b>23</b>
VII	CP-451 Industrial Training (0-3-0) 3	Program Elective III 4	Program Elective IV 4	Program Elective V 4	CP-453 Design Elective 6	Open Elective V 4				<b>25</b>			3	18	4	<b>25</b>
VIII	CP-452 Project 10	Program Elective VI 4	Program Elective VII 4						Discipline 1	<b>19</b>		1	10	8	0	<b>19</b>
Total Credits										180		<b>51</b>	<b>75</b>	<b>34</b>	<b>20</b>	<b>180</b>

**Program Elective I**

- CP-371 Object Oriented Programming
- CP-373 Logical and Functional Programming
- CP-375 Programming in Java
- CP-377 Concurrent Programming

**Program Elective II**

- CP-372 Digital Signal Processing
- CP-374 Wireless Communications
- CP-376 VHDL
- CP-378 Neural Networks

**Program Elective III**

- CP-471 Computer Graphics
- CP-473 Speech Recognition
- CP-475 Mobile Computing
- CP-477 Software Project Management
- CP-479 Data Compression

**Program Elective IV**

- CP-481 Advances in Compiler Design
- CP-483 Natural Language Processing
- CP-485 Programming Paradigms
- CP-487 Wireless & Ad-hoc Networks
- CP-489 Real Time Systems

**Program Elective V**

- CP-491 Cryptography
- CP-493 Embedded Systems
- CP-495 Data Mining
- CP-497 VLSI Algorithms

**Program Elective VI**

- CP-470 Network Security
- CP-472 Biometrics
- CP-474 High Level Synthesis of Digital Syst
- CP-476 Selected Topics in Cryptography
- CP-478 Digital Image Processing

**Program Elective VII**

- CP-480 Evolving Architectures
- CP-482 Topics in Advanced Computing
- CP-484 Software Testing and Validation
- CP-486 Machine Learning
- CP-488 Modelling and Simulation