

**Model Plan: Computer Science & Engineering**

**SEMESTER-I**

Course No.	Course Title	Course Type	L	T	P	C	Remarks
MA 101	Mathematics – I	SC	3	1	0	4	
ME 101	Engineering Mechanics	ESC	3	0	0	3	
CH 101	Engineering Chemistry	SC	3	1	2	5	
CE 101	Engineering Drawing	ESC	1	0	4	3	
HS 101	English Language Skills	HSC	2	0	2	3	
EE 101	Basic Electrical Engineering	ESC	3	0	2	4	
			15	2	10		
			<b>27</b>			<b>22</b>	

**SEMESTER II**

Course No.	Course Title	Course Type	L	T	P	C	Remarks
MA 102	Mathematics – II	SC	3	1	0	4	
EC 101	Basic Electronics	ESC	3	0	2	4	
PH 101	Engineering Physics	SC	3	1	2	5	
ME 102	Engineering Thermodynamics	ESC	2	0	0	2	
ES 101	Environmental Science	SC	2	0	0	2	
CS 101	Computer Programming	ESC	2	0	2	3	
ME 103	Workshop Practice-I	ESC	0	0	4	2	
			15	2	10		
			<b>27</b>			<b>22</b>	

*Sc. Core (SC); Sc. Electives (SE); Engg. Sc. Core (ESC); HSS Core (HSC); HSS Elective (HSE); Discipline Core (DC); Discipline Elective (DE); Open Elective (OE); Project Work (PW)*



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**Semester-III**

Course No.	Course Title	Course Type	Contact Hour			Credit	Remarks
			L	T	P		
MA 202	Probability & Statistics	SC	3	0	0	3	
MA 204	Discrete Mathematics	SC	3	0	0	3	
CS 201	Digital Logic Design	DC	3	1	2	5	
CS 202	Data Structures	DC	3	1	2	5	
CS 203	Automata and Formal Languages	DC	3	0	0	3	
XX nnn	OE-I (Signal & Systems)	OE	3	1	0	4	
MA 210	Mathematics Laboratory	SC	0	0	4	2	
			18	3	8		
			29			25	

SC- Science Core, DC- Discipline Core, HSC- HSC Core, OE- Open Elective

**Semester-IV**

Course No.	Course Title	Course Type	Contact Hour			Credit	Remarks
			L	T	P		
CS 204	Computer Organization & Architecture	DC	3	1	2	5	
CS 205	Algorithms	DC	3	0	2	4	
CS 206	Database Systems	DC	3	0	2	4	
CS 207	Principles of Programming Languages	DC	3	0	2	4	
CS 208	OE-II (Data Communication)	OE	3	0	2	4	
XX nnn	Science Elective (e.g. Modern Biology/ Computational Chemistry)	SE	3	0	0	3	
			18	1	10	24	
			29			24	

DC- Discipline Core, SE- Science Elective, OE- Open Elective

**Semester-V**

Course No.	Course Title	Course Type	Contact Hour			Credit	Remarks
			L	T	P		
CS 301	Microprocessors & Interfacing	DC	3	0	2	4	
CS 302	Computer Networks	DC	3	0	2	4	
CS 303	System Programming	DC	3	0	2	4	
CS nnn	DE-I (Computer Graphics)	DE	3	0	2	4	
XX nnn	OE-III (e.g. Image Processing)	OE	3	0	0	3	
HS 301	Foundations of Management	HSC	3	0	0	3	
			18	0	8	22	
			26			22	

DC- Discipline Core, HSC- HSC Core, DE- Discipline Elective, OE- Open Elective

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**Semester-VI**

Course No.	Course Title	Course Type	Contact Hour			Credit	Remarks
			L	T	P		
CS 304	Operating Systems	DC	3	0	2	4	
CS 305	Software Engineering	DC	3	0	2	4	
CS 306	Compiler Design	DC	3	0	2	4	
CS nnn	DE-II (Object Oriented Programming & Design)	DE	3	0	2	4	
XX nnn	OE-IV (Embedded Systems)	OE	3	0	2	4	
HS 302	Accounting and Financial Methods	HSC	3	0	0	3	
			18	0	10		
			28			23	

DC- Discipline Core, HSC- HSC Core, DE- Discipline Elective, OE- Open Elective

**Semester-VII**

Course No.	Course Title	Course Type	Contact Hour			Credit	Remarks
			L	T	P		
CS 401	Project-I	PW	0	0	8	4	
CS nnn	DE-III (Cryptography & Network Security)	DE	3	0	0	3	
CS nnn	DE-IV (Artificial Intelligence)	DE	3	0	0	3	
	OE-V (Wireless Communication)	OE	3	0	0	3	
HS 401	Professional Ethics	HSC	2	0	0	2	
HS nnn	HE(e.g. Economics/ Sociology/ Psychology etc.)	HSE	3	0	0	3	
			14	0	8	18	
			22			18	

PW- Project Work, HSC- HSC Core, HSE- HS Elective, DE- Discipline Elective, OE- Open Elective

**Semester-VIII**

Course No.	Course Title	Course Type	Contact Hour			Credit	Remarks
			L	T	P		
CS 402	Project-II	PW	0	0	16	8	
CS nnn	DE-V (e.g. Data Mining)	DE	3	0	0	3	
CS nnn	DE-VI (e.g. Computational Geometry)	DE	3	0	0	3	
XX nnn	OE-VI (e.g. VLSI Design)	OE	3	0	0	3	
			9	0	16	17	
			25			17	

PW- Project Work, DE- Discipline Elective, OE- Open Elective