



**4 year Curriculum structure
Undergraduate Degree in Engineering & Technology**

**Branch / course: Computer Science and Engineering
Total credits (4 year course): 159**

I. I. Induction Program (Please refer Appendix-A for guidelines)

Induction program (mandatory)	3 weeks duration (Please refer Appendix-A for guidelines & also details available in the curriculum of Mandatory courses)
Induction program for students to be offered right at the start of the first year.	<ul style="list-style-type: none"> • Physical activity • Creative Arts • Universal Human Values • Literary • Proficiency Modules • Lectures by Eminent People • Visits to local Areas • Familiarization to Dept./Branch & Innovations

II Semester-wise structure of curriculum

[L= Lecture, T = Tutorials, P = Practicals & C = Credits]

**Semester I (First year) Curriculum
Branch/Course: Computer Science Engineering**

Sl. No.	Type of course	Course Code	Course Title	Hours per week			Credits
				Lecture	Tutorial	Practical	
1.	Basic Science course	BSC 101	Physics semiconductor	3	0	3	4.5
2.	Basic Science course	BSC 102	Mathematics-II (Algebra)	3	1	0	4
3.	Engineering Science Course	ESC 101	Basic Electrical Engineering	3	1	2	5
4.	Engineering Science Course	ESC 102	Engineering Graphics & Design	1	0	4	3
Total credits							18.5



AICTE Model Curriculum for Undergraduate degree in Computer Science and Engineering (Engineering & Technology)

Semester II (First year] Curriculum
Branch/Course: Computer Science Engineering

Sl. No.	Type of course	Course Code	Course Title	Hours per week			Credits
				Lecture	Tutorial	Practical	
1.	Basic Science course	BSC 202	Chemistry-I	3	1	3	5.5
2.	Basic Science course	BSC 201	Mathematics-III (Probability and Random processes)	3	1	0	4
3.	Engineering Science Course	ESC 201	Programming for Problem Solving	3	0	4	5
4.	Engineering Science Course	ESC 202	Workshop /Manufacturing Practices	1	0	4	3
5.	Humanities & Social Sciences including Management	HSMC 201	English	2	0	2	3
Total credits							20.5

Semester III (Second year] Curriculum
Branch/Course: Computer Science Engineering

Sl. No.	Type of course	Course Code	Course Title	Hours per week			Credits
				Lecture	Tutorial	Practical	
1.	Engineering Science Course	ESC 301	Analog Electronic Circuits	3	0	4	5
2.	Professional Core Courses	PCC-CS301	Data structure & Algorithms	3	0	4	5
3.	Professional Core Courses	ESC 302	Digital Electronics	3	0	4	5
4.	Professional Core Courses	PCC-CS302	IT Workshop (MAT LAB)	1	0	4	3
5.	Basic Science course	BSC 301	Mathematics-III (Discrete Mathematics)	2	0	0	2
6.	Humanities & Social Sciences including Management	HSMC 301	Humanities-I	3	0	0	3

	courses						
Total credits							23



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Semester IV (Second year] Curriculum
Branch/Course: Computer Science Engineering

Sl. No.	Type of course	Course Code	Course Title	Hours per week			Credits
				Lecture	Tutorial	Practical	
1.	Professional Core Courses	PCC - CS401	Signals and Systems	3	1	0	4
2.	Engineering Science Course	PCC-CS 402	Computer Organization & Architecture	3	0	4	5
3.	Professional Core Courses	PCC - CS403	Operating Systems + RTOS	3	0	4	5
4.	Professional Core Courses	PCC-CS404	Design & Analysis of Algorithms	3	0	4	5
5.	Humanities & Social Sciences including Management courses	HSMC 401	Management 1 (Organizational Behavior/ Finance & Accounting)	3	0	0	3
6.	Mandatory Courses	MC	Environmental Sciences	-	-	-	0
Total credits							22

Semester V (Third Year] Curriculum
Branch/Course: Computer Science Engineering

Sl. No.	Type of course	Course Code	Course Title	Hours per week			Credits
				Lecture	Tutorial	Practical	
1.	Engineering Science Course	ESC501	Number Theory	3	0	0	3
2.	Professional Core Courses	PCC-CS501	Database Management Systems	3	0	4	5
3.	Professional Core Courses	PCC-CS502	Formal Language & Automata Theory	3	0	0	3
4.	Professional Core Courses	PCC-CS503	Object Oriented Programming	2	0	4	4
5.	Humanities & Social Sciences including Management courses	HSMC-501	Humanities II (Principle of Management)	3	0	0	3
6.	Professional Elective courses	PEC	Elective-I	3	0	0	3
7.	Mandatory Courses	MC	Constitution of India/ Essence of Indian	-	-	-	0

			Traditional Knowledge				
Total credits							21



AICTE Model Curriculum for Undergraduate degree in Computer Science and Engineering (Engineering & Technology)

Semester VI (Third year] Curriculum
Branch/Course: Computer Science Engineering

Sl. No.	Type of course	Course Code	Course Title	Hours per week			Credits
				Lecture	Tutorial	Practical	
1.	Professional Core Courses	PCC-CS 601	Wireless & Mobile Communication	3	0	4	5
2.	Professional Core Courses	PCC-CS602	Computer Networks	3	0	4	5
3.	Professional Elective courses	PEC	Elective-II Complier Design	3	0	0	3
4.	Professional Elective courses	PEC	Elective-III	3	0	0	3
5.	Open Elective courses	OEC	Open Elective-I (Humanities) Economics & Company Laws	3	0	0	3
6.	Project	PROJ-CS60	Project-1	0	0	6	3
Total credits							22

Semester VII (Fourth year] Curriculum
Branch/Course: Computer Science Engineering

Sl. No.	Type of course	Course Code	Course Title	Hours per week			Credits
				Lecture	Tutorial	Practical	
1.	Professional Elective courses	PEC	Elective-IV	3	0	0	3
2.	Professional Elective courses	PEC	Elective-V	3	0	0	3
3.	Open Elective courses	OEC	Open Elective-II	3	0	0	3
4.	Basic Science course	BSC 701	Biology (Human : Eye , mind ,ear+ Genetics+ Animal society behavior: PSO, ACO..	2	1	0	3
5.	Project	PROJ-CS70	Project-II	0	0	12	6
Total credits							18



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Semester VIII (Fourth year) Curriculum
Branch/Course: Computer Science Engineering

[Summer Industry Internship]

Sl. No.	Type of course	Course Code	Course Title	Hours per week			Credits
				Lecture	Tutorial	Practical	
1.	Professional Elective courses	PEC	Elective-VI	3	0	0	3
2.	Open Elective courses	OEC	Open Elective-III	3	0	0	3
3.	Open Elective courses	OEC	Open Elective-IV	3	0	0	3
4.	Project	PROJ	Project-III	0	0	12	6
Total credits							15