

R23

COURSE STRUCTURE AND SYLLABUS

For

B. Tech.

COMPUTER SCIENCE AND ENGINEERING (CYBER SECURITY)

(Applicable for batches admitted from 2023-24)



PRAGATI ENGINEERING COLLEGE

(An Autonomous Institution)

ADB Road, Surampalem, Kakinada District, A.P. -533437

(Approved by AICTE, New Delhi & Permanently Affiliated to JNTUK, Kakinada)

(Recognized by UGC under sections 2 (f) and 12 (b) of UGC act, 1956)



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(Autonomous)

ADB Road, Surampalem, E.G.Dt., A.P. – 533 437

(Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada, Accredited by NAAC with 'A' Grade)(Recognized by UGC Under Sections 2(f) and 12 (B) of UGC act, 1956)

Ph: 08852 – 252233, 34. Website: www.pragati.ac.in

Department of Computer Science and Engineering (Cyber Security)

Constitution of the Board of Studies for R-23 Regulation

S. No.	Recommended Composition	Details of Person(s) Identified	Phone Number & Email
1	In charge Head of the Department concerned (Chairman)	Dr. M. Uma Devi Associate Professor and HOD	9440896317 umadevi.moka@pragati.ac.in
2	The entire faculty of each specialization	All Faculty of the Department	-----
3	One expert in the subject from outside the college nominated by the Academic Council	Dr. S.D.V. Prasad Associate professor Department of CSE, GITAM, Hyderabad	9966009843 sdvprasad554@gmail.com
4	One expert nominated by the Vice – Chancellor from a panel of six recommended by the college principal.	Dr. A.S.N Chakravarthy Professor, Dept. of CSE, JNTUK , Kakinada	9618719229 asnchakravarthy@jntucek.ac.in
5	One representative from industry /corporate sector/allied area relating to placement.	Sri. Ravi Sankar Pisapati. TCS-Hyderabad.	8978683007 pv.sankar@tcs.com
6	Special Invitee of the Board	Dr. M. Radhika Mani	9440484800 tpo@pragati.ac.in

Dr. M. Uma Devi

HOD-CSE (CS)

Department of Computer Science and Engineering (Cyber Security)

COURSE STRUCTURE

INDUCTION PROGRAMME

S.No.	Course Name	Category	L	T	P	Credits
1	Physical Activities --Sports, Yoga and Meditation ,Plantation	MC	0	0	6	0
2	Career Counseling	MC	2	0	2	0
3	Orientation to all branches--career options, Tools ,etc.	MC	3	0	0	0
4	Orientation on admitted Branch-- Corresponding labs, tools and platforms	EC	2	0	3	0
5	Proficiency Modules & Productivity Tools	ES	2	1	2	0
6	Assessment on basic aptitude and Mathematical skills	MC	2	0	3	0
7	Remedial Training in Foundation Courses	MC	2	1	2	0
8	Human Values & Professional Ethics	MC	3	0	0	0
9	Communication Skills – focus on Listening, Speaking, Reading, Writing skills	BS	2	1	2	0
10	Concepts of Programming	ES	2	0	2	0

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I YEAR –I SEMESTER

Sl. No	Category	Course Code	Course Title	L	T	P	Credits
1	BS&H	23BE101T	Communicative English	2	0	0	2
2	BS&H	23BM101T	Linear Algebra and Calculus	3	0	0	3
3	BS&H	23BC102T	Chemistry	3	0	0	3
4	Engineering Science	23CM101T	Basic Civil and Mechanical Engineering	3	0	0	3
5	Engineering Science	23CS101T	Introduction to Programming	3	0	0	3
6	Engineering Science	23ME102P	Engineering Workshop	0	0	3	1.5
7	BS&H	23BE101P	Communicative English Laboratory	0	0	2	1
8	Engineering Science	23CS101P	Computer Programming Laboratory	0	0	3	1.5
9	BS&H	23BC102P	Chemistry Laboratory	0	0	2	1
10	BS&H	23MH101P	Health and wellness, Yoga and Sports	0	0	1	0.5
Total Credits							19.5

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I YEAR -II SEMESTER

S. No	Category	Course Code	Course Title	L	T	P	Credits
1	BS&H	23BP201T	Engineering Physics	3	0	0	3
2	BS&H	23BM201T	Differential Equations and Vector Calculus	3	0	0	3
3	Engineering Science	23EE201T	Basic Electrical and Electronics Engineering	3	0	0	3
4	Engineering Science	23ME201T	Engineering Graphics	1	0	4	3
5	Professional Core	23CS201T	Data Structures	3	0	0	3
6	BS&H	23BP201P	Engineering Physics Laboratory	0	0	2	1
7	Engineering Science	23EE201P	Electrical and Electronics Engineering Workshop	0	0	3	1.5
8	Professional Core	23CS201P	Data Structures Laboratory	0	0	3	1.5
9	Engineering Science	23IT201P	IT Workshop	0	0	2	1
10	BS&H	23MH202P	NSS /NCC/ Scouts and Guides/ Community Service	0	0	1	0.5
Total Credits							20.5

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B. Tech – II Year I Semester

S. No.	Category	Course Code	Title	L	T	P	Credits
1	BS&H		Discrete Mathematics & Graph Theory	3	0	0	3
2	BS&H		Universal Human Values 2– Understanding Harmony	2	1	0	3
3	Engineering Science		Digital Logic & Computer Organization	3	0	0	3
4	Professional Core		Advanced Data Structures & Algorithm Analysis	3	0	0	3
5	Professional Core		Object Oriented Programming Through Java	3	0	0	3
6	Professional Core		Advanced Data Structures and Algorithm Analysis Laboratory	0	0	3	1.5
7	Professional Core		Object Oriented Programming Through Java Laboratory	0	0	3	1.5
8	Skill Enhancement Course		Python programming	0	1	2	2
9	Audit Course		Environmental Science	2	0	0	0
				16	2	8	20

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B. Tech- II Year II Semester

S. No.	Category	Course Code	Title	L	T	P	Credits
1	Management Course- I		Managerial Economics and Financial Analysis	2	0	0	2
2	Engineering Science/ Basic Science		Number Theory & Applications	3	0	0	3
3	Professional Core		Operating Systems	3	0	0	3
4	Professional Core		Database Management Systems	3	0	0	3
5	Professional Core		Computer Networks	3	0	0	3
6	Professional Core		Computer Networks Laboratory	0	0	3	1.5
7	Professional Core		Database Management Systems Laboratory	0	0	3	1.5
9	Skill Enhancement Course		Full Stack Development-1	0	1	2	2
10	BS&H		Design Thinking & Innovation	1	0	2	2
Total				15	1	10	21
				Mandatory Community Service Project Internship of 08weeks duration during summer vacation			