

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (Autonomous)

Gandipet, Hyderabad -75

Department Of Computer Science and Engineering

Program Outcomes/Program Specific Outcomes(PSOs) Attainment of Batch 2017-2021

S.No.	Course	Program Outcomes												PSOs	
	Name	1	2	3	4	5	6	7	8	9	10	11	12	1	2
C101	Engg. Maths – I	2.68	2.09	2.22	2.09	-	-	-	-	-	-	-	2.09	1.78	2.68
C102	Engg. Physics	2.25	2.25	0.75	0.60	0.75	0.75	0.44	-	-	0.75	-	0.75	0.31	0.15
C103	Applied Chemistry	2.49	1.66	1.95	-	-	1.66	1.66	-	-	-	-	1.66	-	-
C104	Elements of EE	1.57	1.00	0.88	0.63	0.84	-	-	-	-	-	-	-	0.94	-
C105	Engg. Mechanics	2.89	1.93	-	-	-	-	-	-	-	-	-	0.96	-	-
C106	PC in English	-	0.97	1.92	-	-	0.95	-	0.49	1.19	1.59	0.97	0.97	0.92	0.97
C107	Environ. Studies	1.00	-	-	-	-	1.40	3.00	1.33	-	-	-	1.00	1.00	-
C108	Engg. Graphics	1.87	0.85	-	-	1.43	-	-	-	0.85	1.57	0.72	1.29	0.58	1.57
C109	Engineering Physics Laboratory	1.41	0.94	1.27	0.79	0.79	1.09	1.25	0.79	0.79	0.79	0.79	0.79	-	-
C110	Applied Chem. Lab	1.61	1.61	-	1.61	-	1.44	1.44	-	-	-	-	-	-	-
C111	Prof. Comm. Lab	-	-	-	-	-	-	-	-	-	0.70	0.46	-	-	-
C112	Engg. Maths- II	2.65	2.21	2.21	2.36	-	-	-	-	-	-	-	2.07	2.06	-
C113	Engg. Chemistry	2.59	1.73	1.87	-	-	1.58	1.73	-	-	-	-	1.73	-	-
C114	Applied Physics	2.59	2.59	1.26	0.87	0.86	0.86	0.86	0.83	0.86	0.86	0.87	0.86	0.34	0.17
C115	Prog. Problem Sol.	2.04	1.64	1.70	-	0.68	-	-	-	-	-	-	0.76	0.63	0.63
C116	Elements ME	2.13	1.66	1.69	1.39	1.21	1.55	1.39	1.08	1.11	1.41	1.35	1.39	-	-
C117	Elements of ECE	1.16	1.4	0.58	-	-	-	-	-	-	-	-	-	0.68	0.51
C118	PEHV	1.91	2.18	2.12	1.79	1.57	2.45	2.45	2.45	2.45	2.45	2.45	2.45	-	-
C119	Programming Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	1.74
C120	Mech. and IT WS	0.74	-	-	-	0.92	0.92	-	-	1.07	-	-	0.93	-	-
C121	Applied Phy. Lab	0.96	0.68	0.95	0.82	0.68	0.68	0.83	0.68	0.68	0.68	0.68	0.68	-	-
C122	Engg.Chem Lab	1.59	1.43	-	1.45	-	1.45	1.45	-	-	-	-	-	-	-
C123	Engg. Maths-III	2.38	2.09	1.96	2.10	-	-	-	-	-	-	-	1.95	1.54	-
C124	Data Structures	1.81	1.68	1.69	1.47	1.58	1.18	0.68	0.64	0.98	1.17	1.05	1.28	0.64	0.93
C125	OOOPs using Java	1.91	2.22	0.95	0.95	2.46	-	-	-	-	-	-	-	0.95	0.95
C126	LST	1.78	1.78	1.73	1.51	1.31	1.55	-	-	-	-	-	-	-	1.78
C127	Discrete Structures	1.35	0.97	-	-	-	-	-	-	-	-	-	-	-	-
C128	DS Lab	-	1.96	-	2.72	0.91	2.26	0.91	0.91	2.72	0.90	2.10	2.10	0.91	1.81
C129	OOOPs using java Lab	1.66	1.93	0.83	0.81	1.80	-	-	-	-	-	-	-	0.83	0.83
C130	SS & Employability Enhancement	0.47	0.47	0.47	0.47	0.47	0.72	-	-	2.08	1.60	1.59	1.76	0.72	-

	Lab														
C131	Mini Project-I	2.10	1.92	2.88	2.89	1.93	1.96	1.96	1.43	2.77	2.90	1.86	1.89	1.86	1.86
C132	DBMS	0.84	1.56	1.67	1.28	1.44	-	-	-	-	-	-	-	0.72	1.44
C133	Web Technologies	2.18	1.65	2.18	1.28	2.70	2.18	1.65	1.80	2.70	2.70	1.28	2.18	1.80	2.70
C134	CAMP	1.95	1.81	1.44	1.26	1.49	-	1.46	-	-	1.50	-	-	0.51	1.16
C135	Prob. & Stat. using R	1.50	1.04	1.60	-	-	-	-	-	1.38	-	0.92	-	-	1.50
C136	Engg. Economics and Accountancy	0.91	1.35	1.14	1.27	1.03	0.67	0.91	0.93	0.69	0.68	0.99	0.74	0.69	0.91
C137	DBMS Lab	1.46	2.27	2.42	-	1.81	-	-	-	-	-	-	-	0.91	1.46
C138	Web Tech. Lab	1.90	1.76	1.76	1.32	2.64	1.61	1.61	1.18	1.91	1.91	-	1.91	-	1.03
C139	CA and MP Lab	2.22	2.37	2.35	1.90	2.73	2.31	2.75	-	-	2.48	-	-	0.92	1.84
C140	LPSL	-	-	1.51	-	1.51	-	-	-	1.86	2.21	2.21	1.33	-	1.33
C141	Shell Scripting	0.83	-	-	0.68	0.95	-	-	0.70	0.70	0.70	-	1.07	-	-
C142	DAA	1.64	1.77	1.77	-	-	-	-	-	-	-	-	-	0.76	1.64
C143	ALC	2.06	1.78	0.71	1.19	1.61	-	-	-	-	-	-	1.05	-	-
C144	OS	2.22	2.22	1.83	1.47	-	-	-	-	1.74	1.74	-	1.62	-	-
C145	DCCN	1.00	-	-	-	-	1.21	-	0.60	-	-	-	-	0.61	0.61
C146	Software Engineering	1.47	1.29	1.09	1.19	1.19	1.29	1.19	1.37	1.27	1.27	1.27	1.47	1.27	1.19
C147	OS Lab	2.83	2.83	2.36	1.89	-	-	-	-	2.20	2.21	-	2.04	-	-
C148	DCCN Lab	1.71	-	1.85	-	-	-	0.94	-	-	-	-	-	-	1.39
C149	SE Lab	2.87	2.55	2.23	2.39	2.39	2.55	2.38	2.70	2.54	2.54	2.54	2.87	2.55	2.39
C150	Mobile App Dev.	2.13	1.83	1.98	-	1.52	-	-	-	0.76	-	0.76	0.76	0.76	0.76
C151	Comp. Graphics	1.99	1.55	1.33	1.03	1.54	-	-	-	-	-	-	-	1.99	0.66
C152	Compiler Construction	2.35	2.08	0.82	1.25	2.12	-	-	-	-	-	-	1.49	-	-
C153	AI	2.52	2.68	1.79	1.93	-	2.61	-	-	-	-	-	2.68	2.68	1.72
C154	MC	1.35	0.68	0.69	1.51	-	0.77	-	1.24	-	1.06	-	1.00	0.73	0.69
C155	Info. & N/W Security	2.39	1.60	1.45	1.18	1.56	1.60	-	1.60	1.05	0.92	0.80	1.60	-	1.20
C156	IoT	1.48	1.47	2.01	2.00	1.86	1.70	1.54	1.66	2.01	1.54	1.66	1.85	1.70	1.85
C157	INS Lab	1.78	1.94	1.78	1.94	1.78	1.62	-	1.30	1.30	1.30	0.65	1.94	-	-
C158	IoT Lab	1.76	1.91	2.25	1.76	2.41	2.09	1.92	1.53	1.92	1.92	1.92	1.77	1.93	1.77
C159	Mini Project-II	2.13	1.98	2.97	2.83	1.91	1.90	1.90	1.46	2.84	2.96	1.95	1.97	1.95	1.95
C160	Soft Computing	1.48	0.95	0.85	0.91	0.68	-	1.94	-	0.62	0.62	0.16	0.16	1.63	-
C161	Data Mining	2.39	1.98	1.35	1.85	1.66	2.08	1.68	1.68	-	0.42	-	1.29	1.18	1.47
C162	Data Science and Big Data Analytics	2.69	2.27	1.93	2.26	2.66	0.93	-	-	1.92	0.96	0.96	2.26	1.93	2.66
C163	Free and Open Source Software	2.44	2.44	2.08	2.09	2.09	2.09	1.30	1.73	1.30	1.74	1.74	1.56	1.05	2.61
C164	Distributed and Cloud Computing	2.83	2.45	2.45	1.32	1.14	0.94	-	-	-	-	-	-	-	-
C165	Machine Learning	2.69	2.69	0.90	2.69	2.36	-	-	-	-	-	-	2.69	2.69	1.80
C166	DSBDA Lab	2.40	1.45	1.44	1.54	1.93	0.95	-	-	1.28	0.64	0.77	1.44	-	1.93
C167	ML Lab	2.88	2.56	1.43	2.72	2.50	-	-	-	-	-	-	1.76	2.56	2.56
C168	Project Seminar	0.60	0.40	-	-	0.25	0.83	-	0.56	-	0.75	-	0.83	1.05	1.05
C169	Deep Learning	1.32	1.19	1.04	1.79	1.82	-	-	-	-	0.85	-	0.82	-	2.14
C170	SNA	2.15	2.27	2.15	2.08	1.96	1.20	0.95	-	1.26	1.95	1.27	1.96	2.34	1.84
C171	DMM	1	1	1	-	-	1	1	-	1	1	1	-	1	1
C172	Entrepreneurship	1.67	1.67	1.50	1.49	1.86	1.90	1.24	1.17	1.50	1.50	2.04	1.29	-	-

C173	RM	0.95	0.96	0.76	1.29	0.94	0.40	-	-	0.40	1.10	0.81	0.73	0.51	0.51
C174	GS	-	-	-	-	-	0.585	-	0.648	0.7425	0.7425	-	0.648	0.648	-
C175	Seminars	0.79	0.79	0.72	0.79	0.85	0.27	-	-	0.48	0.48	-	-	0.85	0.92
C176	Projects	2.10	1.91	2.97	2.79	2.37	1.91	-	0.95	2.86	2.76	1.91	1.91	1.95	1.91
C177	Cyber Security	1.80	1.74	1.02	2.02	1.84	1.92	0.73	1.29	1.69	1.43	1.35	1.74	-	0.88
C178	NLP	2.45	2.01	0.78	1.32	2.14	-	-	-	-	-	-	1.33	-	-
C179	HCI	2.83	0.94	1.33	0.94	0.94	1.85	0.92	-	0.92	0.94	-	0.94	-	-
C180	SNII	1.61	1.94	0.97	0.72	1.29	-	-	-	-	-	-	-	0.81	0.81
C181	Blockchain Tech.	2.77	2.59	1.31	-	-	-	-	-	-	-	-	-	-	-
C182	QC	1.73	1.73	1.03	-	-	-	-	-	0.87	-	-	0.87	-	0.87
C183	IP Rights	1.755	1.68	-	-	0.9	0.8775	-	0.585	-	-	-	-	-	-
C184	HST	2.02	1.13	1.15	1.00	1.15	1.16	1.30	0.86	0.87	1.44	0.87	1.44	0.62	0.62
Average PO/PSO Attainment		1.85	1.67	1.47	1.43	1.42	1.24	1.10	0.95	1.27	1.28	1.06	1.39	1.05	1.16
100% Expectation		2.33	2.13	1.84	1.93	1.87	1.81	1.71	1.31	1.79	1.76	1.47	1.75	1.61	1.75
67% Target		1.56	1.43	1.23	1.29	1.25	1.21	1.15	0.88	1.20	1.18	0.98	1.17	1.08	1.17

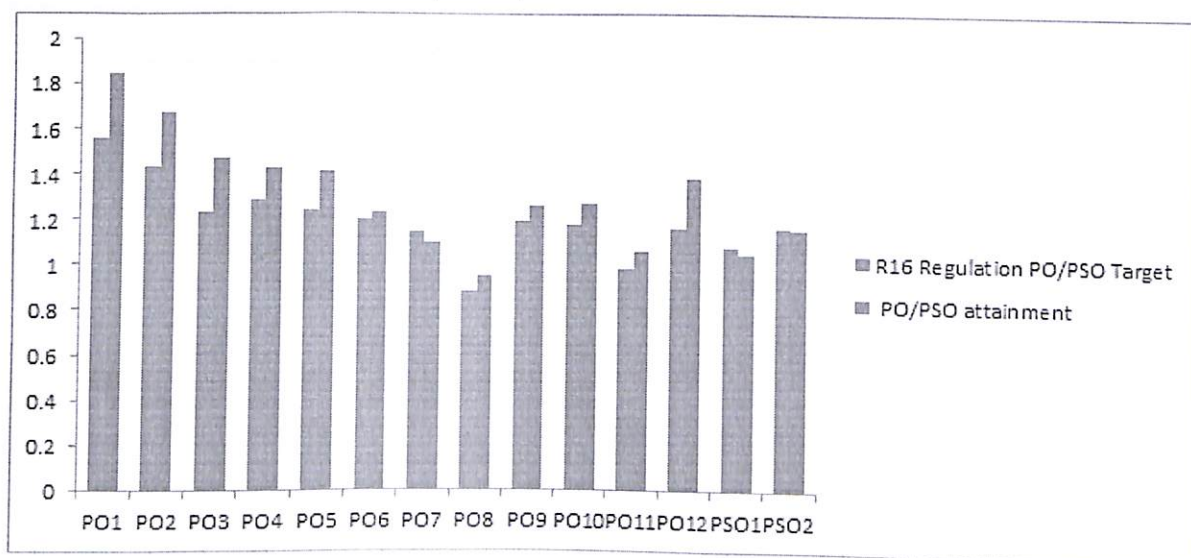


Figure 1: Program Outcome (PO) /Program Specific Outcome (PSO) Attainment of Batch 2017 and Target PO/PSO


Head of the Department

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COMMITTED TO
RESEARCH,
INNOVATION AND
EDUCATION

43
years

Name of the Department: Computer Science and Engineering

Academic Year: 2020-2021(Batch 2017-2021 passed out)

UG Program: CSE

	Target Fixed	Target Achieved	Observation(Attained/Not Attained)	Actions Taken		
				A1	A2	A3
PO1	1.56	1.85	Attained	Extensively used ICT tools to promote teaching learning in an effective manner.	To provide access to video lectures through learning management system(LMS)	In Discrete structures, more examples were discussed in complex concepts for better understanding.
PO2	1.43	1.67	Attained	Students will be motivated to participate in Hackathons/Coding Contests to develop problem solving skills.	Seminar course is introduced where student identifies a problem and do study of literature to solve the problem.	Facilitate students to take part in the industry internship related to get exposed to latest technological developments

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PO3	1.23	1.47	Attained	Students are encouraged to involve in IEEE, CSI activities to improve demanding skills in social and environmental considerations.	Assignments and case studies are given to the students to meet specific requirements in terms of design of solutions for algorithms.	More practical oriented problems are solved and analyzed in the course Mini Project.
PO4	1.29	1.43	Attained	More industrial visits have been planned for the students to give an exposure to practical-research related issues on various projects	To work towards the establishment of industry oriented lab thereby promoting research caliber among the students.	Core subjects are added with case studies in a practical-oriented manner.
PO5	1.25	1.42	Attained	Training on advanced tools are provided in the area of Deep Learning, Linux Programming.	To motivate the students to get exposed to the modern programming frameworks such as Full Stack Development framework.	Introduced Case-study Lab to enable students to explore modern tools in an innovative manner.
PO6	1.21	1.24	Attained	Encourage students to take part in societal, cultural events to get exposed to profession practice	The syllabus for the course Professional Human Ethical Values(PHEV) has been designed to meet the requirements of health, safety and cultural	The courses like Intellectual Property Rights and History of Science and Technology are introduced to make the student to understand

					issues.	societal and cultural issues.
PO7	1.15	1.10	Attained	Courses, that deal with environmental and sustainability issues, have been introduced with the aim of understanding the impact of professional engineering solutions in societal and environmental contexts.	To encourage students to take up projects through which relationship between technical, socioeconomic & environmental dimensions of sustainability will be understood.	
PO8	0.88	0.95	Attained	To introduce a new course on ethics titled “UHV-2”, “Understanding of Harmony” as suggested by UGC.	The courses like Research Methodology and IPR are included in the curriculum to address the Ethical Values.	Encourage students to undertake projects in various domains and work on novel ideas to understand the significance of ethics and avoid plagiarism during report writing.
PO9	1.20	1.27	Attained	To encourage the students to participate in group activities in terms of project, extra-curricular and co-curricular under various clubs in the Institute	As an individual, summer internships are taken up by the students at various organizations during every semester gap.	Encourage the students to take up mini and major projects and work in teams to build the team work spirit.

PO10	1.18	1.28	Attained	Students are encouraged to undergo Soft skills training programs that which enhances various aspects of communication/technical discussions.	To revise the rubrics used to evaluate the CIE of projects, seminars so that more focus is given to student's ability in oral communication (presentations skills), written communication (report writing) and summarization (conclusion).	A course (IT workshop with Latex and Scilab) is included in the curriculum for improving the writing skills.
PO11	0.98	1.06	Attained	Students are encouraged to participate in national and international level events like SIH, GOC, Microsoft Gaming event, GitHub repository, JPMC code for good, Dell ambassdor programme, Linux Foundation.	Encourage students to take up mini and major projects and work in teams for the development of the work in multidisciplinary environments.	Encourage students to carry out quality and application oriented projects. Funding up to Rs. 10,000/- is sanctioned towards the same. In exceptional cases, higher funding is also considered.
PO12	1.17	1.39	Attained	Technical and career guidance sessions are being conducted by senior students and Alumni.	Students are encouraged to work on Research Projects of faculty members related to UGC and DST.	Bootcamps and Hackathons are conducted by COSC and other professional bodies to engage the students in life-long learning practice.
PSO1	1.08	1.05	Attained	Introduced Artificial Intelligence as a core course	Conducted a 5 Day International Workshop	

				and Machine Learning, Data science with Bigdata Analytics Courses as Professional Electives to impart practical knowledge.	on “Building Data Driven Solution Using Data Analytics With L And DI Algorithm” in CBIT, to enable both students and faculty to gain knowledge in Computer Vision.	
PSO2	1.17	1.16	Attained	Good number of projects are implemented in the area of Natural Language Processing, pattern recognition and deep learning.	Web Development Workshop is conducted to enable the students to gain exposure to the latest open source tools for web development.	LMS Based Virtual Labs are conducted to enable the students to explore various Open source Technologies.

Evidences:

1. Drive Link for CO PO mapping Sheets Semester wise: <https://drive.google.com/drive/folders/1nzjH-Q53nsCa-NVEwNiDx8mOyC-bhf-7?usp=sharing>
2. Complete PO attainment table for 2017 batch (AY: 2020-21) hard copy endorsed by head of the department.

Head of the Department

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