INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

Department of Electronics and Communication Engineering

Attainment of Program Outcomes (POs) of 2022 - 2024 batch (IARE-PG21)

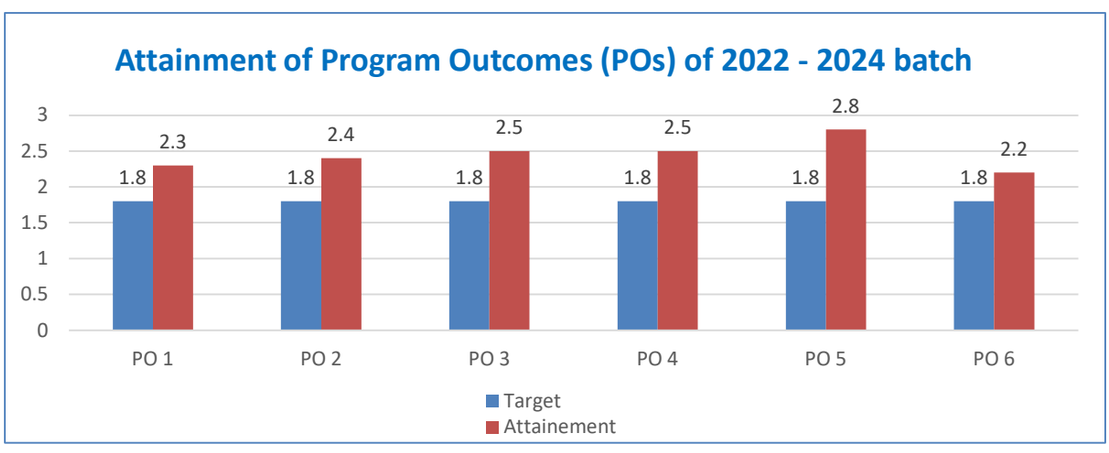
Subject Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6
BESC01	Embedded System Design and Architecture	1.60	--	2.00	1.90	--	1.60
BESC02	Microcontrollers and Programmable Digital Signal Processing	1.20	--	1.20	1.50	--	--
BESC06	Wireless LANS and PANS	2.00	2.00	2.80	2.70	2.00	2.80
BESC10	Principles of Distributed Embedded Systems	1.90	--	2.30	2.00	--	1.20
BESC11	Embedded Systems Laboratory	3.00	--	3.00	3.00	--	--
BESC12	Microcontrollers and Programmable Digital Signal Processors Laboratory	3.00	--	3.00	3.00	--	--
BESC13	Advanced Microprocessors and Interfacing	2.40	--	2.50	2.50	--	--
BESC14	Internet of Things	2.60	2.70	2.60	--	--	--
BESC15	Embedded Wireless Sensor Networks	--	--	2.30	2.20		2.10
BESC19	Embedded Networking	--	--	2.00	2.00	--	--
BESC23	Advanced Microprocessors and Interfacing Laboratory	3.00	--	3.00	3.00	--	--
BESC24	Internet of Things Laboratory	3.00	--	3.00	3.00	--	--
BESC25	Mini Project with Seminar	3.00	3.00	3.00	3.00	3.00	3.00
BESC29	Communication Network	1.30	--	1.30	1.20	--	--
BHSC11	Research Methodology and IPR	1.10	1.10	--	--	--	1.00
BPSC30	Waste to Energy	1.90	1.90	--	--	--	1.90
BESC31	Phase - I Dissertation	3.00	3.00	3.00	3.00	3.00	3.00
BESC32	Phase - II Dissertation	3.00	3.00	3.00	3.00	3.00	3.00
Direct Attainment Value		**2.3**	**2.4**	**2.5**	**2.5**	**2.8**	**2.2**

Overall Attainment

S No.	Assessment Component (Direct + Indirect)	Program Outcomes					
		PO1	PO2	PO3	PO4	PO5	PO6
1.	Direct Assessment (CIA + SEE + Course End Survey) (a)	2.3	2.4	2.5	2.5	2.8	2.2
2.	Student Program exit surveys (b)	2.4	2.3	1.7	2.3	2.4	2.0
3.	Alumni Survey (c)	2.4	2.3	1.7	2.3	2.4	2.0
4.	Employer surveys (d)	2.0	1.7	1.3	2.2	2.4	1.9
Overall attainment = a*0.8 + b*0.1 + c*0.05 + d*0.05		**2.3**	**2.4**	**2.3**	**2.5**	**2.7**	**2.2**

Table: POs Attainment Levels and Actions for improvement

POs	Target Level	Attainment Level	Observations
PO1: Independently carry out research / investigation and development work to solve practical problems.			
PO1	**1.8**	**2.3**	Target achieved
The following measures have been initiated to enhance the PO1 attainment level: • Additional research facilities, gradually making a significant contribution for better attainment of PO1. • Mini projects related to advanced topics in the area of Embedded domain will enhance the attainment • The program has made it mandatory to publish a paper related to the domain of project work. • Continuing efforts through literature and courses in lifelong learning			
PO2: Write and present a substantial technical report / document.			
PO2	**1.8**	**2.4**	Target achieved
The following measures have been initiated to enhance the PO2 attainment level: • The program decided to have a very strong focus on improving student publications, and on quality publications. • The focus on publications enabled students to improve their technical report writing skills significantly. • The program has made it mandatory to publish a paper related to the project. • Mini Project with seminar was introduced as separate course in the revised curriculum. This has enabled students to improve their technical report/document writing skills.			
PO3: Demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level of higher than the requirements in the appropriate bachelor program.			
PO3	**1.8**	**2.5**	Target achieved
The following measures have been initiated to enhance the PO3 attainment level: • Using modern tools in the laboratory, such as MATLAB, Keil, enhances the demonstration levels of the program. • Improving curriculum by introducing topics related to research. • The elective courses provide breadth of experience in the area of embedded systems and its real time applications.			
PO4: Apply the skills and knowledge needed to serve as a professional engineer skillful at designing embedded systems for effective use in communications, IoT, medical electronics and signal processing applications			
PO4	**1.8**	**2.5**	Target achieved
The following measures have been initiated to enhance the PO4 attainment level: • Enriched the curriculum by including new courses as Program Electives. • New labs have been introduced with the use of state-of-the-art modern tools like PSOC simulator, Keil and MATLAB. • Students are encouraged to carry the mini projects in the multi domain areas			
PO5: Function on multidisciplinary environments by working cooperatively, creatively, and responsibly as a member of a team.			
PO5	**1.8**	**2.8**	Target achieved
The following measures have been initiated to enhance the PO5 attainment level: • Some course coordinators introduced mini projects / seminars in their courses, for which students had to work independently. This contributed to the increase in PO5 attainment • Mini Project with Seminar and Project work also helps to work cooperatively in a team and individually.			
PO6: Recognize the need to engage in lifelong learning through continuing education and research.			
PO6	**1.8**	**2.2**	Target achieved
The following measures have been initiated to enhance the PO6 attainment level: • Students were motivated to do the research in advanced areas in premier institutions • Students were motivated to take up NPTEL certification courses.			



Head of the Department

Dr. P. MUNASWAMY M.Tech, Ph.D, MISTE
Professor & Head
ELECTRONICS AND COMMUNICATION ENGINEERING
INSTITUTE OF AERONAUTICAL ENGINEERING
Dundigal, Hyderabad- 500 043, T.S.