



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

Department of Electrical and Electronics Engineering

Attainment of Program Outcomes (POs) of 2021 - 2023 batch (IAE – PG21)

Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6
BPSC01	Modern Power System Analysis	1.90	2.00	2.00	2.00	2.20	1.80
BPSC02	Economic Operation of Power Systems	2.20	2.50	2.10			
BPSC03	HVDC Transmission and FACTS	2.90	2.90	2.90	2.90		2.90
BPSC08	Hybrid Electric Vehicles	2.80	2.70	2.30			2.30
BPSC11	Power System Computational Laboratory	3.00	3.00	3.00	3.00	3.00	3.00
BHSC11	Research Methodology and IPR	1.10	1.90	2.20			
BPSC12	Internet of Things Laboratory	3.00	3.00	3.00			
BPSC13	Digital Protection of Power System	2.40	2.40	2.90	2.40		2.20
BPSC14	Power System Dynamics and Stability	2.90	2.90	2.90	2.00	1.60	1.20
BPSC16	Industrial Load Modelling and Control	2.90	3.00	2.50	2.30		
BPSC20	Power Quality	2.40	3.00	2.90			2.40
BPSC23	Artificial Intelligence in Power System Laboratory	0.90	0.90	0.90			
BPSC24	Power Systems Laboratory	3.00	3.00	3.00	3.00	3.00	3.00
BPSC25	Mini Project with Seminar	3.00	3.00	3.00	3.00	3.00	3.00
BPSC26	SCADA System and Applications	2.60	2.60	1.30	2.90		
BPSC30	Waste to Energy	3.00	3.00	3.00	3.00	3.00	3.00
BPSC31	Phase -I Dissertation	3.00	3.00	3.00			
BPSC32	Phase-II Dissertation	3.00	3.00	3.00			
Direct Attainment		2.6	2.6	2.5	2.6	2.6	2.4

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)	2.6	2.6	2.5	2.6	2.6	2.4
2.	Student Program exit surveys (b)	2.1	2.4	1.5	1.8	2.1	1.5
3.	Employer surveys (c)	2.1	2.4	1.5	1.8	2.1	1.5
4.	Alumni Survey (d)	1.8	2.4	3.0	3.0	2.4	1.2
Overall attainment = $a \times 0.8 + b \times 0.1 + c \times 0.05 + d \times 0.05$		2.5	2.6	2.4	2.5	2.5	2.2

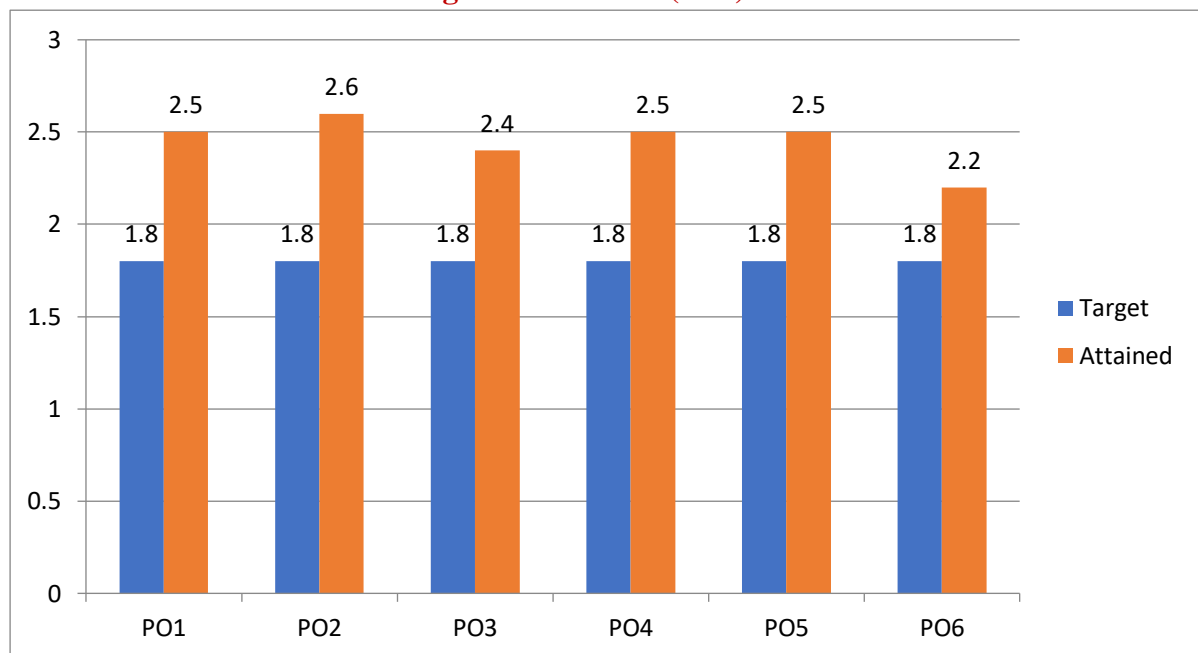
POs Attainment Levels and Actions for improvement:

The observations made and the action taken for the achieved POs attainment level for 2021-2023 batch of students is expressed in the Table .

POs	Target Level	Attainment Level	Observations
PO1: An ability to independently carry out research/investigation and development work to solve practical problems.			
PO1	1.8	2.5	Target is achieved. The following actions were taken to enhance the target level.
<p>The following measures have been initiated to enhance the PO1 attainment level:</p> <p>Additional research facilities, gradually making a significant contribution for better attainment of PO1 through,</p> <ul style="list-style-type: none"> Mini projects related to advanced topics in the area of Power Systems domain will enhance the attainment The program has made it mandatory to publish a paper related to the domain of project work. 			
PO2: An ability to write and present a substantial technical report/document			
PO2	1.8	2.6	Target is achieved. The following actions were taken to enhance the target level.
<p>The following measures have been initiated to enhance the PO2 attainment level:</p> <p>The program decided to have a very strong focus on improving student publications, and also on quality publications.</p> <ul style="list-style-type: none"> 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. 			
PO3: Student should be able to 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	2.4	Target is achieved. The following actions were taken to enhance the target level.
<p>The following measures have been initiated to enhance the PO3 attainment level:</p> <ul style="list-style-type: none"> Using simulation tools in the laboratory, such as MATLAB, PSCAD, enhances the demonstration levels of the program. The elective courses provide breadth of experience in the area of Power systems and its real time applications and courses. 			
PO4: Identify, formulate and solve complex problems on modern-day issues of Power Systems using advanced technologies with a global perspective and envisage advanced research in thrust areas			
PO4	1.8	2.5	Target is achieved. The following actions were taken to enhance the target level.
<p>The following measures have been initiated to enhance the PO4 attainment level:</p> <ul style="list-style-type: none"> 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 to improve practical skills of the students 			
PO5: Model and apply appropriate techniques and modern tools on contemporary issues in multidisciplinary environment.			
PO5	1.8	2.5	Target is achieved. The following actions were taken to enhance the target level.
<p>The following measures have been initiated to enhance the PO5 attainment level:</p> <ul style="list-style-type: none"> 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 digital communication and digital signal processing courses. 			
PO6: Engage in life-long learning for education in doctoral level studies and professional development			

PO6	1.8	2.2	Target is achieved. The following actions were taken to enhance the target level.
The following measures have been initiated to enhance the PO6 attainment level: <ul style="list-style-type: none"> • Students were motivated to do the research in advanced areas in premier institution • Students were motivated to take up NPTEL certification courses. 			

Attainment of Program Outcomes (POs) for 2021-2023 Batch




HOD, EEE
 Head of the Department
 Electrical and Electronics Engineering
 INSTITUTE OF AERONAUTICAL ENGINEERING
 Dundigal, Hyderabad-500 043.