

Haldia Institute of Technology



Academic Audit Report 2022-23
of
Department of Electrical Engineering

Internal Audit Committee

Sl. No.	Name	Designation	Responsibility
1	Prof. (Dr.) DilipDey	Professor	Chairman
2	Prof. (Dr.) Palash Pal	Professor	Member
3	Mr. Goutam Das	Assistant Professor	Member
4	Mr. Sourav Das	Assistant Professor	Member
5	Dr. Pratyay Konar	Associate Professor	Convener

ACADEMIC AUDIT CERTIFICATE

(Internal Audit)

This to certify that an Academic Audit for Electrical Engineering Department of Haldia Institute of Technology Haldia (HIT), ICARE Complex, Hatiberia, Haldia, Dist.: Purba-Medinipur, W.B., Pin: 721657 has been conducted in July 2022 to June 2023 to assess the performance of academic activity of the department.

Place: HIT, Haldia

Date: 18 September, 2023



Dr. Dilip Dey
Chairman



Dr. Pratyay Konar
Convener

ACADEMIC AUDIT REPORT 2022-23

Direct PSO Attainment for 2022-23					
Course Code	Course Name	PSO1	PSO2	PSO3	PSO4
PC-EE 301	Electrical Network Analysis	1.71	1.71	1.76	1.79
PC-EE 302	Analog Electronics Circuit	1.8	1.92	2.03	1.76
PC-EE 303	Electric field theory	1.06	1.06	1.27	1.27
BS-EE 302	Biology for Engineers	1.57	1.93	1.57	1.69
BS-M 301	Mathematics -III	1.1	1.1	1.32	1.32
ES-ME 301	Engineering Mechanics	0.89	0.93	1.33	1.33
PC-EE 391	Electric Network Analysis Lab	2.09	2.09	2.15	2.19
PC-EE 392	Analog Electronics Lab	2.41	2.26	2.26	2.35
PC-CS 391	Numerical Methods Lab	2.36	2.36	2.21	2.47
PC-EE 401	Electric machine-I	1.17	1.08	1.08	1.17
PC-EE 402	Digital Electronics	1.83	1.83	1.89	1.92
PC-EE 403	Electrical and Electronics Measurement	1.25	1.15	1	0.78
ES-ME 401	Thermal Power Engineering	1.59	1.33	1.59	1.59
HM-EE 401	Values and Ethics in Profession	1.8	1.92	2.03	1.76
MC-EE 401	Environmental Science	1.71	1.71	1.76	1.79
PC-EE 491	Electric machine-I Lab	2.12	2.26	1.99	1.99
PC-EE 492	Digital Electronics Lab	2.35	2.35	2.42	2.46
PC-EE 493	Electrical and Electronics Measurement Lab	2.22	2.36	2.08	1.83

ES-ME 481	Thermal Power Engineering Lab	2.44	1.63	0.81	0.98
PC-EE 501	Electric machine-II	1.38	2.01	1.38	1.51
PC-EE 502	Power System-I	1.38	2	1.38	1.5
PC-EE 503	Control system	1.06	1.06	1.27	1.27
OE-EE 501	Open Elective - I (Data Structure and Algorithm)	1.06	1.06	1.27	1.27
PE-EE 501A	Professional Elective - I (Digital Signal Processing)	1.57	1.93	1.57	1.69
HM-EE 501	Economics for Engineers	1.57	1.93	1.57	1.69
PC-EE 591	Electric machine-II Lab	1.64	2.39	1.64	1.79
PC-EE 592	Power System-I Lab	1.49	2.16	1.49	1.62
PC-EE 593	Control system Lab	1.39	1.12	0.98	1.26
OE-EE 581	Open Elective - I Lab (Data Structure and Algorithm)	1.53	1.02	1.13	0.89
SE-EE 581	Term Paper and Seminar	1.55	1.42	1.42	1.55
PC-EE 601	Power System - II	0.98	0.76	0.65	0.76
PC-EE 602	Power Electronics	1.1	1.1	1.32	1.32
PC-EE 603	Micro processor & microcontroller	0.89	0.93	1.33	1.33
PE-EE 601 A	Professional Elective - II (Digital Control System)	1.53	1.02	1.13	0.89
OE-EE 601 A	Open Elective - II (Data Base Management System)	1.13	1.7	1.49	1.56
PC-EE 691	Power System - II Lab	1.15	0.89	0.77	0.89
PC-EE 692	Power Electronics Lab	1.59	1.33	1.59	1.59
PC-EE 693	Micro processor& micro controller Lab	1.08	1.14	1.63	1.22
OE-EE691A	Open Elective - II Lab (Data Base Management System)	1.33	1.77	1.33	1.33
PE-EE 701A	Professional Elective - III (Electrical)	1.18	1	0.98	1

	Drives)				
PE-EE702B	Utilization of Electric Power	1.5	1.5	1	1.35
OE-EE 701B	Open Elective - III (Artificial Intelligence and Machine Learning)	1.33	1.77	1.33	1.33
OE-EE 702A	Open Elective - IV (Power Plant Engineering)	2.44	1.63	0.81	0.98
PE-EE 791A	Professional Elective - III lab (Electrical Drives)	1.28	1.28	1.42	0.99
SE-EE 781	Seminar on Industrial Training	2.36	2.36	2.21	2.47
PR-EE 782	Project - I	1.27	1.27	1.41	0.98
HM-EE 801	Organizational Behaviour	1.15	0.89	0.77	0.89
PE-EE801A	HVDC Transmission	1	0.78	0.67	0.78
PE-EE 801D	Sensors and Transducers	1.2	1.75	1.2	1.31
PR-EE881	Project -II	2.12	2.26	1.99	1.99
PE-EE881	Electrical System design	1.59	1.33	1.59	1.59
SE-EE882	Comprehensive Viva Voce	1.64	2.39	1.64	1.79
SE EE 883	SEMINAR ON INTERNSHIP	1.74	2.32	1.74	1.74
	PSO average Direct Attainment	1.54	1.59	1.47	1.48

Indirect PSO Attainment for 2022-23					
ROLL No.	STUDENT NAME	PSO1	PSO2	PSO3	PSO4
1619001	AADITYA DEV JHA	2	3	3	2
1619002	AASTHA RAJ	3	3	2	2
1619003	AAYUSH ANAND	3	2	2	2
1619005	ADITYA SHIVAM	3	3	3	3
1619006	AFTAB ALAM	3	3	2	2
1619007	AKASH DANDAPAT	3	2	3	2
1619008	AKASH KUMAR	3	3	2	3
1619009	ALOK RANJAN	2	3	3	2

1619010	AMIT KUMAR SINGH	2	2	3	3
1619011	AMIT KUMAR YADAV	2	3	3	2
1619012	ANAND ROUTH	3	3	3	2
1619013	ANIK DAS GUPTA	2	3	3	2
1619014	ANIL SINGH	2	3	3	3
1619015	ANIMESH KUMBHAKAR	3	3	3	3
1619016	ANKIT KUMAR	3	3	3	3
1619017	ANKIT KUMAR MEHTA	2	2	3	2
1619018	Ankita Gupta	2	3	3	2
1619019	ANUSHKA PANDEY	3	3	3	3
1619020	ARIJIT SANTRA	3	2	3	2
1619021	ARKA PRAVA MAZUMDER	2	3	3	2
1619022	ARYAN VATSH	2	3	3	3
1619023	ASHISH KUMAR	2	2	2	2
1619025	AYANDEEP MAITY	2	3	2	2
1619027	BIMALENDU JANA	3	3	3	2
1619028	DEEPTI Kumari	2	2	3	3
1619029	DEV DINKAR	2	2	2	3
1619030	DIPANJAN GHOSH	2	2	2	3
1619031	GAURAV KUMAR	3	2	3	3
1619032	GAUTAM KUMAR	3	2	2	2
1619033	GOURAB MONDAL	3	2	2	2
1619034	HIMANSHU SHEKHAR	2	2	3	2
1619035	INDRANIL MAJI	2	2	3	3
1619036	JAYANT KUMAR MONDAL	3	3	3	2
1619037	JEET DAS	3	3	2	2
1619038	JOYESH MAHATO	3	2	3	3
1619039	JYOTI KUMARI	3	2	3	3

1619040	K. NAVEEN PRASAD	3	3	3	2
1619041	KESHAV KUMAR	3	3	3	2
1619042	KISHLAY KUMAR	3	2	3	3
1619043	KOMAL KUMARI	3	2	2	3
1619044	KUNDAN KUMAR ROY	2	3	3	3
1619045	KUSHAGRA SINGH	3	2	3	2
1619046	MINAKSHI KUMARI	3	2	3	2
1619047	MOHAMMAD IJAJ	2	3	2	3
1619048	MOHINI SINGH	3	3	2	2
1619049	MONISHITA CHAKRABORTY	2	2	3	2
1619050	NAVEEN KUMAR	3	3	3	3
1619051	NAYAN KUMAR	3	2	3	2
1619053	NITIN RANJAN	2	2	2	2
1619054	PANKAJ KUMAR	3	2	2	2
1619055	PARTH KUMAR	3	2	2	3
1619056	PRAGYA PRAKASH	3	3	3	2
1619057	PRANSHU LAYEK	2	2	3	3
1619058	PRANTA ROY	2	3	2	2
1619059	PRATYUSH KUMAR	3	3	2	2
1619060	PREM KUMAR	3	2	2	2
1619061	PREMJEET KUMAR	2	3	3	2
1619063	PRIYA KUMARI	2	3	2	3
1619064	PRIYA RANI	2	3	2	3
1619066	RACHIT RAJ	2	3	3	2
1619067	RAHUL KUMAR	3	2	2	2
1619068	RAHUL PATRA	3	3	3	2
1619069	RANJAN KUMAR	2	2	3	3
1619070	RANJIT MONDAL	2	3	2	3

1619071	RATUL MISTRY	3	2	2	3
1619072	RAUNAK DAS	2	2	3	3
1619073	RAUNAK RAJ	2	2	3	3
1619076	RISHU KUMAR	3	3	2	2
1619077	RITESH Kumar	2	2	3	3
1619078	RITIK RAJ	3	2	2	2
1619079	ROHIT VERMA	2	2	2	3
1619080	RUPANJALI	2	3	3	2
1619081	SACHIN KUMAR SINGH	3	2	3	3
1619082	SAHAJAMAL SK	2	2	3	2
1619083	SANCHITA MANDAL	2	2	2	2
1619084	SANDIP KUMAR PAUL	3	2	3	2
1619085	SANDIP PARUA	2	2	3	3
1619086	SARBOJIT BHADRA	2	2	2	2
1619087	SAURABH KUMAR	3	2	2	3
1619088	SAURABH YADAV	3	3	2	2
1619089	SAURAV KUMAR	3	2	3	3
1619090	SAWAN KUMAR	3	3	3	3
1619092	SAYAN SANKI	3	2	2	3
1619093	SHASHI BHUSHAN KUMAR	3	3	3	2
1619094	SHUBHAMAY MANDAL	2	2	3	3
1619096	SHYAMJANAM KUMAR	3	2	3	3
1619097	SOUMYADIP ROY	3	2	2	3
1619098	SOURAVMOY BERA	3	3	2	3
1619099	SOUVIK MAITY	3	2	3	2
1619100	SUBHAM KUMAR SINGH	2	2	2	3
1619101	SUBHAM RAY	3	3	3	2
1619102	SUBHRANIL MANDAL	2	2	3	3

1619103	SUDIPTA BERA	2	3	2	3
1619104	SUMAN KUMAR HEMBROM	3	2	3	2
1619105	SUMAN MAITY	3	3	3	3
1619106	SUMIT KAR	3	2	2	3
1619108	SURAJ KUMAR	2	2	3	2
1619109	SURAJ KUMAR YADAV	3	3	2	2
1619110	SUSHANT KUMAR	3	3	2	3
1619111	SUVOJIT DHARA	3	2	2	2
1619113	TARKESHWAR KUMAR MAHTO	3	2	3	2
1619114	TIYASHA DUTTA	2	2	2	3
1619115	TUSHAR KUMAR RAY	2	3	2	2
1619116	UJJWAL KUMAR	2	2	3	3
1619118	VIKASH KUMAR	3	2	2	2
1619119	VIKASH KUMAR	2	2	3	2
1619120	VIPIN GUPTA	3	2	3	2
1619121	VIPIN KUMAR	2	3	2	3
1619122	VISHAL anurag	3	3	2	2
1619124	WASAB HUSSAIN	3	3	2	3
1619052	NIKHIL KUMAR	3	3	3	2
10301620125	AMLAN SAIN	2	2	2	2
10301620126	ANIRBAN BERA	3	3	3	2
10301620127	HAREKRISHNA MISHRA	2	3	3	2
10301620128	KOUSHIK PRAMANIK	3	3	2	2
10301620129	KOUSHIK SETH	2	2	2	2
10301620130	KUNAL MANNA	3	2	3	3
10301620131	MAMTA KUMARI	3	3	3	3
10301620132	MD AKIL SK	3	3	3	2
10301620133	SABUJ PRAMANIK	2	2	2	3

10301620134	SOUMITRA BERA	2	2	3	2
10301620135	SUBARNA BAG	2	3	3	3
10301620136	SUMAN PANIGRAHI	2	2	3	2
10301620137	TANMOY DAS	3	2	3	3

Overall PO attainment for 2022-23												
2022-23	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Direct	1.82	1.68	1.64	1.58	1.52	1.54	1.48	1.65	1.43	1.52	1.52	1.71
Indirect	2.56	2.53	2.52	2.55	2.56	2.59	2.55	2.61	2.49	2.44	2.48	2.51
Overall	1.97	1.85	1.82	1.77	1.73	1.75	1.69	1.84	1.64	1.70	1.71	1.87

Overall PSO attainment for 2022-23				
2022-23	PSO1	PSO2	PSO3	PSO4
Direct	1.54	1.59	1.47	1.48
Indirect	2.56	2.46	2.59	2.45
Overall	1.74	1.76	1.69	1.67

Criterion and Suggestions				
CRITERION 1: CURRICULUM				
Sl. No.	Items	Verification Yes / No	Comments	Suggestions for improvement
1.	Steps followed in the designing of syllabus & curriculum	Yes	Followed by MAKAUT syllabus and Autonomy Syllabus	Not Applicable
2.	Contents of the Curriculum	Yes	Followed by MAKAUT syllabus and Autonomy Syllabus	Not Applicable
3.	Validation done	Yes	Followed by MAKAUT syllabus and Autonomy Syllabus	Not Applicable
4.	Credits allotted / distribution logic	Yes	Followed by MAKAUT syllabus and Autonomy Syllabus	Not Applicable
CRITERION 2: CURRICULUM TRANSACTION				
1.	Teaching methods & teaching aids	Yes	PPT, Project, seminar, Industrial training, ICT	Satisfactory
2.	E-learning modules	Yes	Lecture material uploaded on college website	More modules need to be developed
3.	Project work UG/PG	Yes	UG	Publication needed
4.	Internal assessment – components – Uniqueness	Yes	Class test, Assignment, Technical Quiz, Mini Project, Attendance	Satisfactory
5.	Student support – remedial coaching	Yes	Topic based discussion with prior notification from department	Satisfactory
6.	Parents meeting – evaluation of student's progress	Yes	Result published on University and Institute website	Parent meetings should be held regular basis and should be documented.
7.	Feedback from students	Yes	Offline and Online feedback taken through feedback form	Satisfactory
8.	Steps taken on the feedback	Yes	As per student feedback remedial action have been taken	Satisfactory

CRITERION 3: FACULTY PROFILE				
Sl. No.	Items	Verification Yes / No	Comments	Suggestions for improvement
1.	Projects completed / ongoing	Yes	01	More project activity should be involved
2.	Seminars / conferences attended	Yes	90	Satisfactory
3.	Papers / articles / books published / Patent	Yes	16	Improved but further quality journal publication is required.
4.	FDP / RC / OC / Training Program / Workshop	Yes	02	Try to organize FDP in the department
5.	Preparation of E-learning materials / Content	Yes	Available on Institutional website	Satisfactory
6.	Acted as resource persons	Yes	02	More initiative should be taken in consideration
CRITERION 4: PROFILE OF STUDENTS				
1.	Sanctioned Strength	Yes	120 per year +10% Lateral	NA
2.	Actual Strength	Yes	382 nos.	Excellent
3.	Mentor Allocation	Yes	Well maintained students mentorship	Excellent
4.	Mentor allocation ratio	Yes	20:1	Excellent
5.	Students involvement in extra-curricular & Co-curricular activities	Yes	<ul style="list-style-type: none"> ● Active IEEE Student branch under IIT, KGP ● Illuminate-Students Club ● Annual sports etc. 	Outstanding
6.	Study tour / industrial visits / exhibitions / Internship / Training	Yes	Industrial visits, Exhibitions, Internship, Training	Satisfactory
7.	Achievements	Yes	<ul style="list-style-type: none"> ● Awards from various competitions ● 2 nos. GATE Qualified 	Satisfactory

CRITERION 5: INFRASTRUCTURE IN THE DEPARTMENT				
Sl. No.	Items	Verification Yes / No	Comments	Suggestions for improvement
1.	No. of Class Rooms	Yes	5	Satisfactory
2.	No. of Laboratories	Yes	10	Satisfactory
3.	No. of computers – for Teachers	Yes	21	Satisfactory
4.	No. of computers – for students	Yes	30	Satisfactory
5.	No. of Experimental Setups	Yes	As per MAKAUT and Autonomous Syllabus	Excellent
6.	No. of Instruments	Yes	As per MAKAUT and Autonomous Syllabus	Excellent
7.	Departmental Library	Yes	No. of Title: 525 nos. No. of Books: 1337 nos.	Incorporate some Journals
8.	Internet Connectivity	Yes	52 mbps	Satisfactory
CRITERION 6: ACTIVITIES OF THE DEPARTMENT				
1.	Consultancy	Yes	Nil	Upgradation needed
2.	Collaborations	Yes	Yes	Satisfactory
3.	Guest Lectures	Yes	Yes	Satisfactory
4.	Conference / Seminar / Workshop conducted	Yes	Yes	Satisfactory
5.	Interaction with Industry / Research Centres / Educational Institutions	Yes	Yes	Satisfactory
6.	Newsletters / Magazine	Yes	Yearly Newswire and Illuminate Magazine	Satisfactory
7.	Placement	Yes	90%	Excellent