

Aliah University

Department of Electronics and Communication Engineering

Academic Audit

Academic Year: 2023-2024

Asw 25/7/24

B/w
25/07/2024

Asw 25/7/24
25/07/24
25.07.24
Nam
25-07-24

Internal Academic Audit Committee
Dept. of Electronics and Communication Engg.
Aliah University, New Town, Kolkata



Asw 25/7/24

The Academic Audit process of Aliah University focuses on four key functional areas:

1. Academic Management
2. Academic Practices
3. Infrastructure and supportive facilities
4. Initiatives and Supplementation

Aswathy

Checked & Compared

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Academic Management

Information about HOD/ HOD (Officiating)

- 1] Name: Dr. Md. Asraful Sekh
- 2] Designation: Associate Professor & HoD, ECE
- 3] Qualification: M.Tech., Ph.D.(Tech.)
- 4] Teaching experience (in years): 19.5 years
- 5] Industry experience (if any in years): 3 years
- 6] Number of teaching hours per week: more than 20 hours (including lectures, tutorial, practical, B.Tech & M.Tech project supervision)
- 7] Number of Research Projects/Publications/Study material developed during the academic year (provide list in separate sheet):

Academic Year	Number of Research Projects	Number of Publications	Number of Study Material Developed	Remarks (Annexure No. for details)
2023-24	1	Journal: 01 Conference: 04	nil	Annexure-I (2023-24)

- 8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

Academic Year	Seminars/Workshops/lectures/field visits organized	Remarks (Annexure No. for details)
2023-24	One-Day Workshop on Recent Trends in Innovation and Technology organized by the Dept. of ECE in association with Institution's Innovation Council (IIC), Aliah University on 07.12.2023.	

- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity	Remarks (Annexure No. for details)
i) PhD Admission Committee	Chairman	Various activities for admission of PhD scholars in 2023-24 session	Annexure-II (2023-24)
ii) Examination Committee	Member	Examination related matters including purchase of related items	
iii) Revision of Common Engg. Curriculum (UG & PG)	Member	Participating in various meetings for Syllabus & Curriculum related	
iv) BOS, Dept. of ECE	Member	Activities related to University Syllabus revision/modification related	

v) NAAC Sub Committee	Member	Collecting data related to Criteria IV- Infrastructure and Learning Resources	
vi) Re-Admission Committee	Member	Participating in meetings for student re-admission related.	

10] Other responsibilities (Please specify, add rows if required):

1	Lab In Charge of Optical Communication Lab
2	Member of DSC and DRC of ECE, Supervising 3 PhD Scholars
3	Chairman, DRC & DPC of ECE and Member, DPC of Chemistry

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required): NA

1	
2	

12] Engagement of Teacher with other Institute/university: Nil

Annexure-I (Md. Asraful Sekh, 2023-24)

Research Project (M.Tech)

Sl. No.	Title	Academic Year	Student Name (Roll No.)
1.	Quality Evaluation of Poppy Seeds with Deep Learning Technology	2023-24	Shihab Ul Islam (ECE222002)

Journal Publication

1. **'Optimization of Bidirectional Hybrid Passive Optical Networks FSO System with Different Data Format'**, International Journal of Emerging Technologies and Innovative Research (www.jetir.org), A. Begam and **Md. A. Sekh**, ISSN:2349-5162, Vol.11, Issue 5, page no.i763-i768, May-2024, <http://www.jetir.org/papers/JETIR2405900.pdf>

Conference Publication

1. **'Investigation and Demonstration of Hybrid Passive Optical Networks for Smart City Application'**, Anjumanara Begam, Md Asraful Sekh, 5th Int. Conf. on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV), March, 2024, IEEE Xplore, DOI:10.1109/ICICV62344.2024.00019
2. **'Simulation and Modeling of Multi-Bounce Impulse Responses of Indoor Visual Light Communication Link for Any Arbitrary Optical Transmitter and Receiver Positions'**, Supratim Subhra Das and Md Asraful Sekh, Int. Conf. on Computer, Electrical & Communication Engineering (ICCECE), February 2024, IEEE Xplore, DOI:10.1109/ICCECE58645.2024.10497339
3. **'Design of Secured Hybrid passive Optical Networks for FSO System'**, Anjumanara Begam and Md Asraful Sekh, 4th Int. Conf. on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), January 2024, IEEE Xplore, DOI: 10.1109/ICAECT60202.2024.10469086

4. 'Performance Study of ZnO/SnO Thin Film Heterojunction Solar Cell', Lipika Mondal, Syed Sadique Anwer Askari, Md Asraful Sekh and Aref Billaha, 8th Int. Conf. on Computers and Devices for Communication, CODEC-2023, December 2023, IEEE Xplore, DOI: [10.1109/CODEC60112.2023.10466046](https://doi.org/10.1109/CODEC60112.2023.10466046)

Annexure-II (Md. Asraful Sekh, 2023-24)

1. PhD Admission Committee 2023-24-Memo no. AU/REG/0609/23, dated 29.08.2023
2. Examination Committee - Memo no. AU/REG/0290/22, dated 15.06.2022
3. Grievance Redressal Committee- Memo no. AU/REG/0319/17, dated 12.04.2017
4. Revision of Common Engg. Curriculum (UG & PG) Committee- Memo no. AU/REG/0104/18, dated 02.02.2018
5. Member of B.O.S. for Electronics & Communication Engineering Department-Memo no. AU/REG/1272/17, dated 01.12.2017
6. Committee, NAAC Criteria IV- Memo no. AU/REG/0586/20, dated 29.10.2020.
7. Re-Admission Committee- Memo no. AU/REG/0516/23, dated 03.08.2023

Checked & Compared

Asraful Sekh

Information about Teaching Members (to be filled by individual teaching member) 2022-23**DR. SK. MOINUL HAQUE**

1] Name: Dr. SK. Moinul Haque

2] Designation: Associate Professor

3] Qualification: Ph.D

4] Teaching experience (in years):16

5] Industry experience (if any in years): nil

6] Number of teaching hours per week:18

7] Number of Research Projects/Publications/Study material developed during
The academic year (provide list in separate sheet):

Number of Research Projects	Number of Publications	Number of Study material Developed	Remarks (Annexure No. for details)
	Journal: 02	Nil	Annexure 1

8] Contribution to enrich quality of teaching-learning during the academic year:
(Seminars/Workshops/lectures/field visits organized):

Academic Year	Seminar/ Workshops/ Lecturer/ Field visits organised	Remarks (Annexure No. for details)

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Research and development cell	Member	Research
DRC, ECE	Convenor	Research
Journal	Member	Publication
MATLAB, Purchase	Chairman	Procurement

10] Other responsibilities (Please specify, add rows if required):

1	Lab in charge of Microwave Lab
2	Lab in charge of wireless communication lab

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

1	
2	

Checked & Compared

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Annexure-I (Dr. SK Moinul Haque, 2023-24)

Publication:

Journal:

- [1] E. Khan, M.ASR Laskar, K. M. Parvez, SK.M.Haque, “*3D-Structure Coupled Monopole Designs with Lower Frequency Resonance*”, ETRI Journal, pp. 1-12, March, 2024. doi: 10.4218/etrij.2023-0415
- [2] L.MD. AS Rahaman, K. M. Parvez, SK. M. Haque, “*Design of Non-Planar Dipole Antenna for Enhanced Resonant Frequency Reduction*”, International Journal on Communications Antenna and Propagation, vol. 14, No. 2, 2024.

Checked & Compared

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DR. QUAZI. MOHAMMAD ALFRED

- 1] Name: **Dr. Quazi Mohammad Alfred**
- 2] Designation: Associate Professor and HoD
- 3] Qualification: PhD(Engineering), M.Tech, B.Tech
- 4] Teaching experience (in years): 22 years
- 5] Industry experience (if any in years): Nil
- 6] Number of teaching hours per week: more than 20 hours (including lectures, tutorial, practical, B.Tech & M.Tech project supervision)
- 7] Number of Research Projects/Publications/Study material developed during the academic year (provide list in separate sheet):

Academic Year	Number of Research Projects	Number of Publications	Number of Study Material Developed	Remarks (Annexure No. for details)
2023-24	nil	Book: Nil Book chapters: 04 Journals: 03 Int. Conf.: 03	nil	Annexure-I

- 8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

Academic Year	Seminars/Workshops/lectures/field visits organized	Remarks (Annexure No. for details)
2023-24	(i) Invited talk on Electronics at SIP 2023 in Purulia Govt Engineering College on 05.10.23 (ii) Invited as Judge at JISTech 2023 in JIS college of Engineering, Kalyani on 24-25 November 2023 (iii) Organized Internal Hackathon for Smart India Hackathon 2023 in Aliah University on 27.09.2023	Annexure-II

- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity	Remarks (Annexure No. for details)

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i) University	Chairman	AUAT 2024	Annexure-III
ii) NIRF & ARIIA Committee	Convener	Applying for NIRF and NIRF-Innovation ranking process.	
iv) Institution Innovation Council (IIC), Aliah University	President	Promotion of Research and Innovation Activity under IIC, Ministry of Education(MoE), GoI	

10] Other responsibilities (Please specify, add rows if required): NIL

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required): NIL

1	Some action plan was taken as HoD of the department (ANNEX-III)
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12] Engagement of Teacher with other Institute/university: NIL

ANNEXURE-I

Books/Book chapter

1. Industry 5.0 for Smart Healthcare Technologies: Utilizing Artificial Intelligence, Internet of Medical Things and Blockchain. Jayanta Kumar Ray Rogina Sultana, Quazi Mohammad Alfred, Imtiaj Ahmed, Taylor & Francis.

2. Intelligent Systems for IoE Based Smart Cities , Bentham Science Publishers 2023.

3. Millimetre Wave V2X Communications in 5G for Achieving Reliability in Vehicle Drive, CRC Press, 2024.

4. Modelling of Virtual Worlds Using the Internet of Things, Jayanta Kumar Ray, Rogina Sultana, Rabindranath Bera, Sanjib Sil, Quazi Mohammad Alfred, Imtiaj Ahmed, CRC press 2024.

Journals:

- (i) Md Anoarul Islam, Manabendra Maity, Judhajit Sanyal and Quazi Mohammad Alfred, "Comparative Study of 5G Signal Attenuation Estimation Models", *Journal of Information Systems and Communication*, Vol-11, No.42, pp, 84-93, 2023.
- (ii) Md Anoarul Islam, Manabendra Maiti, Ardhendu Shekhar Biswas, Vivekananda Mukherjee, Judhajit Sanyal, Quazi Md. Alfred, "Multi-model Machine Learning Based Pathloss Estimation fo Indoor 5G Signal Propagation at 12 Ghz.", *International Journal of Intelligent Systems and Application in Engineering(IJISA)*, Vol 12, No.4, pp.86–95, 2024.
- (iii) Jayanta Kumar Ray , Ramsundar Ghorai, Sanjib Sil, Rabindra Nath Bera, , Quazi Mohammad Alfred, "Analysis of BLER and Throughput for 5G System ", *Procedia Computer Science* , Vol 235C, pp. 3326-3339, 2024.

Conference:

- (i) J. K. Ray, R.Ghorai, R. Bera, S. Sil and Q. M. Alfred, Analysis of BLER and throughput for 5G System , *International Conference on Machine Learning and Data Science(ICMLDE)*, UPES , Dehradun, India 23-24 November 2023.

- (ii) J. K. Ray, R. Ghorai, R. Bera, S. Sil and Q. M. Alfred, Evaluation of BLER and throughput during the coexistence of two 5G NR, *2nd International Conference on Human-Centric Smart Computing (ICHSC 2023)*, UEM JAIPUR AND SPRINGER, 5-6 July, 2023.
- (iii) Jayanta Kumar Ray, Rabindranath Bera, Quazi Mohammad Alfred, Bikash Sharma, Sanjib Sil, Soumen Khatua, Evaluation of BER, Reliability and Throughput During the Vertical Coexistence of 4G LTE and 5G NR 2024. *IEEE 4th International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA)*, 19 th May, 2024.

Checked & Compared

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DR. MD. ASRAFUL SEKH

- 1] Name: Dr. Md. Asraful Sekh
- 2] Designation: Associate Professor & HoD, ECE
- 3] Qualification: M.Tech., Ph.D.(Tech.)
- 4] Teaching experience (in years): 19.5 years
- 5] Industry experience (if any in years): 3 years
- 6] Number of teaching hours per week: more than 20 hours (including lectures, tutorial, practical, B.Tech & M.Tech project supervision)
- 7] Number of Research Projects/Publications/Study material developed during the academic year (provide list in separate sheet):

Academic Year	Number of Research Projects	Number of Publications	Number of Study Material Developed	Remarks (Annexure No. for details)
2023-24	1	Journal: 01 Conference: 04	nil	Annexure-I (2023-24)

- 8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

Academic Year	Seminars/Workshops/lectures/field visits organized	Remarks (Annexure No. for details)
2023-24	One-Day Workshop on Recent Trends in Innovation and Technology organized by the Dept. of ECE in association with Institution's Innovation Council (IIC), Aliah University on 07.12.2023.	

- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity	Remarks (Annexure No. for details)
i) PhD Admission Committee	Chairman	Various activities for admission of PhD scholars in 2023-24 session	Annexure-II (2023-24)
ii) Examination Committee	Member	Examination related matters including purchase of related items	
iii) Revision of Common Engg. Curriculum (UG & PG)	Member	Participating in various meetings for Syllabus & Curriculum related	
iv) BOS, Dept. of ECE	Member	Activities related to University Syllabus revision/modification related	
v) NAAC Sub Committee	Member	Collecting data related to Criteria IV- Infrastructure and Learning Resources	
vi) Re-Admission			

Committee	Member	Participating in meetings for student re-admission related.	Internal Academic Audit (2023-2024)
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10] Other responsibilities (Please specify, add rows if required):

1	Lab In Charge of Optical Communication Lab
2	Member of DSC and DRC of ECE, Supervising 3 PhD Scholars
3	Chairman, DRC & DPC of ECE and Member, DPC of Chemistry

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required): NA

1	
2	

12] Engagement of Teacher with other Institute/university: Nil

Annexure-I (Md. Asraful Sekh, 2023-24)

Research Project (M.Tech)

Sl. No.	Title	Academic Year	Student Name (Roll No.)
1.	Quality Evaluation of Poppy Seeds with Deep Learning Technology	2023-24	Shihab UI Islam (ECE222002)

Journal Publication

1. **'Optimization of Bidirectional Hybrid Passive Optical Networks FSO System with Different Data Format'**, International Journal of Emerging Technologies and Innovative Research (www.jetir.org), A. Begam and **Md. A. Sekh**, ISSN:2349-5162, Vol.11, Issue 5, page no.i763-i768, May-2024, <http://www.jetir.org/papers/JETIR2405900.pdf>

Conference Publication

1. **'Investigation and Demonstration of Hybrid Passive Optical Networks for Smart City Application'**, Anjumanara Begam, Md Asraful Sekh, 5th Int. Conf. on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV), March, 2024, IEEE Xplore, DOI:10.1109/ICICV62344.2024.00019
2. **'Simulation and Modeling of Multi-Bounce Impulse Responses of Indoor Visual Light Communication Link for Any Arbitrary Optical Transmitter and Receiver Positions'**, Supratim Subhra Das and Md Asraful Sekh, Int. Conf. on Computer, Electrical & Communication Engineering (ICCECE), February 2024, IEEE Xplore, DOI:10.1109/ICCECE58645.2024.10497339
3. **'Design of Secured Hybrid passive Optical Networks for FSO System'**, Anjumanara Begam and Md Asraful Sekh, 4th Int. Conf. on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), January 2024, IEEE Xplore, DOI: 10.1109/ICAECT60202.2024.10469086

- Internal Academic Audit (2023-2024)
4. **'Performance Study of ZnO/SnO Thin Film Heterojunction Solar Cell'**, Lipika Mondal, Syed Sadique Anwer Askari, Md Asraful Sekh and Aref Billaha, 8th Int. Conf. on Computers and Devices for Communication, CODEC-2023, December 2023, IEEE Xplore, DOI: [10.1109/CODEC60112.2023.10466046](https://doi.org/10.1109/CODEC60112.2023.10466046)

Annexure-II (Md. Asraful Sekh, 2023-24)

1. PhD Admission Committee 2023-24-Memo no. AU/REG/0609/23, dated 29.08.2023
2. Examination Committee - Memo no. AU/REG/0290/22, dated 15.06.2022
3. Grievance Redressal Committee- Memo no. AU/REG/0319/17, dated 12.04.2017
4. Revision of Common Engg. Curriculum (UG & PG) Committee- Memo no. AU/REG/0104/18, dated 02.02.2018
5. Member of B.O.S. for Electronics & Communication Engineering Department-Memo no. AU/REG/1272/17, dated 01.12.2017
6. Committee, NAAC Criteria IV- Memo no. AU/REG/0586/20, dated 29.10.2020.
7. Re-Admission Committee- Memo no. AU/REG/0516/23, dated 03.08.2023

Checked & Compared

.....*[Signature]* 25/8/24

DR. SK. BABAR ALI

1] Name: Dr. Sk Babar Ali

2] Designation: Associate Professor

3] Qualification: PhD. (Engineering)

4] Teaching experience (in years): 14 Years

5] Industry experience (if any in years): Nil

6] Number of teaching hours per week: 26 Hours per week

7] Number of Research Projects/Publications/Study material developed during The academic year (provide list in separate sheet):

Academic year	Number of Research Projects	Number of Publications	Number of Study material developed	Remarks
2023-24	2 (M.Tech Research Project, 1 completed in June 2024 and 01 on going)	04	Nil	Annexure-I (2023-24)

8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

Academic Year	Seminars/Workshops/lectures/field visits organized	Remarks (Annexure No. for details)
2023-24	One-Day Workshop on Recent Trends in Innovation and Technology organized by the Dept. of ECE in association with Institution's Innovation Council (IIC), Aliah University on 07.12.2023.	

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Purchase Committee, Dept. of ECE	Member	Related to purchase
Departmental committee (DC), ECE	Member	Related to departmental activities
Board of Studies, Dept. of ECE	Member	Academics
BRS, Dept. of ECE	Member	Research Studies
Anti-Ragging Committee,	Convenor	Related to ragging

10] Other responsibilities (Please specify, add rows if required):

1	University Nodal officer of AISHE, UGC and AUI
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11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

12] Engagement of Teacher with other Institute/university:

1	Subject expert for the recruitment of faculty in the department of ECE in Future Institute of Engineering and Management, Kolkata 700150.
2	Moderation of 10 Papers of B.Tech for Odd and Even Semester Examination of EEE Department of Institute of Engineering and Management Kolkata

Annexure-I

Number of Publications

Academic Year 2023-24

Journal:

- (1) S Banerjee, M Dhara, H Naskar, B Ghatak, **Sk Babar Ali**, N Das, D K Das, R Bandyopadhyay, B Tudu, Selective Electrochemical Detection of Thymoquinone in Black Cumin Using Titanium Oxide-Modified Graphite Paste Electrode, Journal of Nano LIFE, vol. 14 no. 02, (2024).

Book chapter

- (2) B Tudu, H Naskar, B Ghatak, S Banerjee, M Dhara, S Ghosh, SK Babar Ali, N Das, R Banerjee Roy, R Bandyopadhyay, Recent trends in polymer nanocomposites with molecular imprints and their electrochemical applications: An overview, Journal of comprehensive Material Processing, vol. 4, pp. 326-339, (2024).

Patent:

- (3) Barnali Ghatak, Sanjoy Banerjee, Hamonto Naskar, Sk Babar Ali, Nityananda Das Bipan Tudu, Rajib Bandyopadhyay, A formulation of eco e-paint for flexible electronics, Patent No: 519310, Date of Grant: 04/03/2024.
- (4) Barnali Ghatak, Sanjoy Banerjee, Sk Babar Ali, Nityananda Das Bipan Tudu, Rajib Bandyopadhyay, Dipankar Mandal, Self-Charging Multi-Layer Triboelectric PPE, International Publication Number: US20230223870A1, Publication date 13 July 2023.

Research project(M.Tech)

Sl. No.	Title	Academic Year	Student Name (Roll No.)	Year of Passing
1	Development of Optical Fiber Sensor for Identify the Adulteration of Indian Spices	2023-24	Shihabul Islam (ECE222002)	2024
2.	Design of device & circuits/sensor networks for communication.	2024-2025	Susmita Purkait (ECE232002)	2025

DR. MD ABDUL ALIM SHEIKH

1] Name: Dr. MD ABDUL ALIM SHEIKH

2] Designation: Assistant Professor

3] Qualification: PhD

4] Teaching experience (in years): 15 years

5] Industry experience (if any in years): Nil

6] Number of teaching hours per week: 20 Hours per week

7] Number of Research Projects/Publications/Study material developed during The academic year (provide list in separate sheet):

Academic year	Number of Research Projects	Number of Publications	Number of Study material developed	Remarks
2023-2024	01	01 Journal paper 01 Patent granted	3	Annexure-1

8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

Academic year	Teaching-learning Activity (Seminars/Workshops/lectures/field visits organized)	Remarks
2023-2024	<ul style="list-style-type: none"> One day Workshop on "Recent Trends in Innovation and Technology" held on 7th December 2023, organized by Dept. of Electronics and Communication Engineering, Aliah University Organized seminars for students 	

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Saksham Committee	Member	Related to empowerment of women in university campus
Purchase Committee, Dept. of ECE	Member	Related to purchase
Departmental committee (DC), ECE	Member	Related to departmental activities
Board of Studies, Dept. of ECE	Member	Academics

10] Other responsibilities (Please specify, add rows if required):

DR. MD ABDUL ALIM SHEIKH

1] Name: Dr. MD ABDUL ALIM SHEIKH

2] Designation: Assistant Professor

3] Qualification: PhD

4] Teaching experience (in years): 15 years

5] Industry experience (if any in years): Nil

6] Number of teaching hours per week: 20 Hours per week

7] Number of Research Projects/Publications/Study material developed during The academic year (provide list in separate sheet):

Academic year	Number of Research Projects	Number of Publications	Number of Study material developed	Remarks
2023-2024	01	01 Journal paper 01 Patent granted	3	Annexure-1

8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

Academic year	Teaching-learning Activity (Seminars/Workshops/lectures/field visits organized)	Remarks
2023-2024	<ul style="list-style-type: none"> One day Workshop on "Recent Trends in Innovation and Technology" held on 7th December 2023, organized by Dept. of Electronics and Communication Engineering, Aliah University Organized seminars for students 	

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity
Saksham Committee	Member	Related to empowerment of women in university campus
Purchase Committee, Dept. of ECE	Member	Related to purchase
Departmental committee (DC), ECE	Member	Related to departmental activities
Board of Studies, Dept. of ECE	Member	Academics

10] Other responsibilities (Please specify, add rows if required):

1	Student Advisor, 4th year, Dept. of Electronics & Communication Engineering
2	Related to NAAC

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

1	<p><u>Collaborative and cooperative learning</u></p> <p>This is the most common form of active learning, involving group or team work of some kind. Collaborative learning is where the students work together for shared outcomes and are assessed as a group, whereas cooperative learning refers to group work where a common goal is produced, but students are assessed individually. It is easy to apply to any discipline; provides excellent real-world experience in transferable skills for students; and students learn together by sharing strengths.</p>
2	<p><u>Active learning</u></p> <p>Explore teaching and learning methods that put the student in charge of their own learning through meaningful activities.</p>
3	<p><u>Problem based learning</u></p> <p>A student-centred approach, where students learn about a subject through understanding and solving problems.</p>

Annexure-I

Number of Publications

Academic Year 2023-24

1. Md. Abdul Alim Sheikh, Tanmoy Maity, Alok Kole, "A Deep Learning Approach for Road Extraction from Remote Sensing Imagery" ICTACT Journal on Soft Computing, vol. 13, No. 02, pp. 2879-2889, 2023. DOI: 10.21917/ijsc.2023.0398

2. UK Design Patent granted by UK Intellectual Property Office

ALOK KOLE, MOHAMMAD ABDUL ALIM SHEIKH, BANASHREE CHATTERJEE, MONALISA CHAKRABORTY, TANAJIT MANNA "AI BASED SKIN CANCER INSPECTION DEVICE" February 2024

Design number: 6345660

Research project

Sl. No.	Title	Academic Year	Student Name (Roll No.)	Year of Passing
1.	Heart Failure Prediction using Machine Learning Techniques	2023-24	Md. Rejaul Karim	Ongoing

SOMSUBHRA TALAPATRA

- 1] Name: Somsubhra Talapatra
- 2] Designation: Assistant Professor, Stage-1
- 3] Qualification: M.E. in ETCE
- 4] Teaching experience (in years): 19 years at the end of AY2023-24
- 5] Industry experience (if any in years): 4.25 years
- 6] Number of teaching hours per week: more than 17 hours (including lectures, tutorial, practical, B.Tech project supervision)
- 7] Number of Research Projects/Publications/Study material developed during the academic year (provide list in separate sheet):

Academic Year	Number of Research Projects	Number of Publications	Number of Study Material Developed	Remarks (Annexure No. for details)
2023-24	M.Tech : 1			Annexure-I

- 8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

Academic Year	Seminars/Workshops/lectures/field visits organized	Remarks (Annexure No. for details)
2023-24		

- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity	Remarks (Annexure No. for details)
Board of Studies, ECE	Member	Question paper moderations of even and odd semester papers of B.Tech. and M.Tech.	
Purchase Committee, ECE	Member	Activities related to purchase of equipments for one INSPIRE Faculty in ECE.	

- 10] Other responsibilities (Please specify, add rows if required):

1	Semester Examination Invigilation Duties 1) Session 2023-24, Odd Sem, End Term Exam, Total = 15.0 Hrs 2) Session 2023-24, Even Sem, End Term Exam, Total = 15.0 Hrs 3) Session 2023-24, Final Year Supplementary Examination (July'24), Total = 3 Hrs.
2	Question Paper Setting and Answer Script Evaluation: 1) ECEUGPC03 & ECEPGPE01, Odd Semester Examination, Session 2023-24 2) ECEUGPC17 & ECEPGPC04, Even Semester Examination, Session 2023-24

3) ECEUGPE01, Final Year Supplementary Examination, July'24, Session 2023-24

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required):

12] Engagement of Teacher with other Institute/university: NIL

Annexure-I:

Related to item-7

Academic Year	Projects/Publications/Study material	Remarks
2023-24	M.Tech Project: Title : "Fruit Image Classification Using Deep Learning".	Status: Completed. Student Name : Samim Pervej Student Roll : ECE212001 Note: Due to extension of three months, some project work had be completed, and the final thesis defense held on 26-Sept.2023.

Checked & Compared

IKBAL ALI

1] Name: Ikbali Ali

2] Designation: Assistant Professor

3] Qualification: M.Tech.

4] Teaching experience (in years): 15 years

5] Industry experience.(if any in years):Nil

6] Number of teaching hours per week: 20 hours (including lectures, tutorial, practical, B.Tech & M.Tech project supervision)

7] Number of Research Projects/Publications/Study material developed during the academic year (provide list in separate sheet):

Academic Year	Number of Research Projects	Number of Publications	Number of Study Material Developed	Remarks (Annexure No. for details)
2020-21	nil	nil	nil	

8] Contribution to enrich quality of teaching-learning during the academic year:(Seminars/Workshops/lectures/field visits organized):

Academic Year	Seminars/Workshops/lectures/field visits organized	Remarks (Annexure No. for details)
2023-24	nil	

9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity	Remarks (Annexure No. for details)
BOS, ECE	Member	Syllabus	
Departmental purchase committee	Member	Preparation of purchase related documents, attending meeting of purchase Committee for procurement of lab equipment etc.	

10] Other responsibilities (Please specify, add rows if required): NIL

1	
2	

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required): NIL

1	
2	

12] Engagement of Teacher with other Institute/university: NIL

ANISUR RAHAMAN1] **Name:** Anisur Rahaman2] **Designation:** Assistant Professor3] **Qualification:** M.Tech.4] **Teaching experience (in years):** 11 years5] **Industry experience (if any in years):** Nil6] **Number of teaching hours per week:** More than 20 hours (including lectures, tutorial, practical, B.Tech & M.Tech project supervision)7] **Number of Research Projects/Publications/Study material developed during the academic year (provide list in separate sheet):**

Academic Year	Number of Research Projects	Number of Publications	Number of Study Material Developed	Remarks (Annexure No. for details)
2023-24	Nil	Nil	Nil	

8] **Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):**

Academic Year	Seminars/Workshops/lectures/field visits organized	Remarks (Annexure No. for details)
2023-24	Nil	

9] **Contribution to the growth and development of the University during the academic year: 2023-24**

Committee	Position held	Work done/ Activity	Remarks (Annexure No. for details)
Purchase Committee, Dept of ECE	Member	Activities for purchase of lab instrument.	
Board of Studies	Member	Syllabus Modification, decision making related to academic activity.	

10] **Other responsibilities (Please specify, add rows if required):**

1	Question paper setting and moderation
2	M. tech Thesis, B. Tech project, student seminar supervision

11] **Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required) :NIL**

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12] Engagement of Teacher with other Institute/university: NIL

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SAIN SHAIKH

- 1] Name: Mr. Sain Shaikh
 2] Designation: Assistant Professor
 3] Qualification: M.Tech.
 4] Teaching experience (in years): 11 years
 5] Industry experience (if any in years): Nil
 6] Number of teaching hours per week: 20 hours (including lectures, tutorial, practical, B.Tech & M.Tech project supervision)
 7] Number of Research Projects/Publications/Study material developed during the academic year (provide list in separate sheet):

Academic Year	Number of Research Projects	Number of Publications	Number of Study Material Developed	Remarks (Annexure No. for details)
2023-24	nil	Nil	Nil	

- 8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

Academic Year	Seminars/Workshops/lectures/field visits organized	Remarks (Annexure No. for details)
2023-24	Field Visit to 1 st year engineering student as a part of SIP	

- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity	Remarks (Annexure No. for details)
i) Purchase Committee of ECE dept. ii) Training & Placement Committee iii) Member of Board of Studie iv) ERP Committee vi) Computer and Network Committee vii) IIPC viii) Committee for Health Scheme	Convenor Member Member Member Convenor Convenor Convenor	Perform various work related to purchase of ECE dept Participating in various meetings Participating in various meetings Participating in various meetings Participating in various meetings and Assist in purchasing procedure of IT related product of university Conducted Induction Program Perform various work	Annexure-II

10] Other responsibilities (Please specify, add rows if required):

1	Faculty Advisor of 3rd yr students
2	Summer Training Coordinator
3	Dept Routine Coordinator
4	Semester Exam Coordinator of ECE dept
5	1st year student incharge
6	Perfomed as AUTA Observer

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required): NIL

1	
2	

12] Engagement of Teacher with other Institute/university: NIL

Checked & Compared

.....*Aswini* 25/8/24

DR. SABIR ALI MONDAL

- 1] Name: Dr. Sabir Ali Mondal
- 2] Designation: Assistant Professor
- 3] Qualification: PhD.
- 4] Teaching experience (in years): 7.5 years
- 5] Industry experience (if any in years):
- 6] Number of teaching-hours per week: more than 24 hours (including lectures, tutorial, practical, B.Tech & M.Tech project supervision)
- 7] Number of Research Projects/Publications/Study material developed during the academic year (provide list in separate sheet):

Academic Year	Number of Research Projects	Number of Publications	Number of Study Material Developed	Remarks (Annexure No. for details)

- 8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

Academic Year	Seminars/Workshops/lectures/field visits organized	Remarks (Annexure No. for details)
2023-24	One day workshop on Recent Trends in Innovation and Technology	Annexure-I

- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity	Remarks (Annexure No. for details)
i) Member DAC, ECE ii) 1 st year coordinator iii) Member, NDLI CLUB AU iv) Member, SC/ST Committee v) Member, DSC/DRC, ECE vi) Member, Purchase Committee, ECE vii) Member, B.O.S. ECE	Member Member Member Member Member Member Member	Participating in various meetings Participating in various meetings Participating in various meetings	Annexure-II

- 10] Other responsibilities (Please specify, add rows if required): NIL

1	
2	

- 11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required): NIL

1	
2	

12] Engagement of Teacher with other Institute/university: NIL

A.H.M. TOUFIQUE AHMED

- 1] Name: A.H.M. TOUFIQUE AHMED
- 2] Designation: Assistant Professor
- 3] Qualification: M.Tech., PhD (Pursuing)
- 4] Teaching experience (in years): 8 Years
- 5] Industry experience.(if any in years): Nil
- 6] Number of teaching hours per week: More than 20 hours (including lectures, tutorial, practical, B.Tech & M.Tech project supervision)
- 7] Number of Research Projects/Publications/Study material developed during the academic year (provide list in separate sheet):

Academic Year	Number of Research Projects	Number of Publications	Number of Study Material Developed	Remarks (Annexure No. for details)
2023-24	Nil	Two International Journal And one international Conference	Nil	Annexure-I

- [8] Contribution to enrich quality of teaching-learning during the academic year: (Seminars/Workshops/lectures/field visits organized):

Academic Year	Seminars/Workshops/lectures/field visits organized	Remarks (Annexure No. for details)
2023-24	<p>I. Short-term course on Application of Machine Learning Techniques in Sustainable Technologies (AMLST-2024), organized by NIT Rourkela, India from 24th January, 2024 to 28th, January, 2024.</p> <p>II. One day workshop on Recent Trends in Innovation and Technology organized jointly by ECE Department and IIC , Aliah University, Kolkata</p>	Annexure-I

- 9] Contribution to the growth and development of the University during the academic year:

Committee	Position held	Work done/ Activity	Remarks (Annexure No. for details)
1. Borad of Studies (BoS) Committee for ECE Department	Member	Participating in various meetings	NA
2. Common Syllabus Committee Member	Member	Participating in various meetings to take decision regarding various open elective courses	

10] Other responsibilities (Please specify, add rows if required):

1	Acted as Mentor for the AICTE recommended Mentor Mentee Network and conducted various meetings
2	

11] Best Practices in teaching & academic-administration introduced in the department in the academic year (Please specify, add rows if required): NIL

1	
2	

12] Engagement of Teacher with other Institute/university: NIL

Annexure-I for 2023-24

[7] Number of Research Projects/Publications/ Study material developed during the academic year (provide list in separate sheet):

1. Dasgupta, Samhita, **AHM Toufique Ahmed**, Ipshita Bhattacharjee, Shreya Firdoushi, Don Biswas, Sumani Mukherjee, Rajib Bandyopadhyay, and Bipan Tudu. "Crafting a Graphite Electrode with Embedded Y_2O_3 Nanoparticles for the Electrochemical Detection of Amaranth in Candies." *IEEE Sensors Journal* (2024).
2. Mukherjee, Sumani, Samhita Dasgupta, Hemanta Naskar, Shreya Firdoushi, Ipshita Bhattacharya, **AHM Toufique Ahmed**, Deepak Kumar Das, Rajib Bandyopadhyay, and Bipan Tudu. "Development of an easy and economical carbon paste electrode for fisetin detection." *Innovation and Emerging Technologies* 11 (2024): 2450005.
3. **AHM Toufique Ahmed**, Samhita Dasgupta, Ipshita Bhattacharjee, Shreya Firdoushi, . Sumani Mukherjee, Rajib Bandyopadhyay, and Bipan Tudu. "Development of Simple and Sensitive CPE based Electrochemical sensor for detection of Quercetin", *International Conference on Systems and Technologies for Smart Agriculture (ICSTA 2023)*, Biswa Bangla Convention Centre , Kolkata, December 19-20, 2023
4. Certificate of participation in short term course organized by NIT Rourkela.

Academic Practices (for the academic year: 2023- 24)

- 1] Total number of teaching-days in the academic year: 215
- 2] Total number of permanent teaching staff: 11+1(DST-IFF)
- 3] Total number of permanent teaching staff with PhD: 06
- 4] Number of programmes offered (please specify): 03 (4years B.Tech., 2 years M.Tech and Ph.D)
- 5] Number of sanctioned intake of students and Number of actual admissions:

Programme	Sanctioned intake	Actual admission
B TECH	Regualr-60, Lateral-6 (to take admission in 2 nd year)+8(vacant seat in 2 nd year)	Regular-58, Lateral-14
M TECH	18	12
Ph.D	10	1

- 6] How many teaching members have attended Orientation Programme/ Refresher Course/ FDP/ Workshop/Training Programme/ Research Methodology Course/Capacity Building Programme etc.: 02
- 7] Number of Orientation Programme/ Refresher Course/ FDP/ Workshop/ Training Programme/ Research Methodology Course/Capacity Building Programme etc. organised by the department: 01
- 8] Number of Training Programme/ Consultancy offered by the department: NONE
- 9] Number of academic collaborations made by the department: NONE
- 10] Innovative practices (please specify): NONE

Teaching-Learning-Evaluation process (for the academic year: 2023-24)

- 1] Does teaching members participate in course designing? NO
- 2] Does the department have a structured Board of Studies or similar academic body to design/ expand/ modify course content? YES
- 3] Does the programme follow:
- a. CBCS structure YES
 - b. Elective-based structure YES
 - c. Any other, please specify
- 4] Does the department follow Academic Calendar implemented by the University? YES
- 5] Use of Teaching-Learning tools/ platforms (Please specify)
- a. OHP YES

- b. LCD YES
 c. Interactive Boards NO
 d. LMS NO
 e. Any other NO

- 6] Use of ICT in Teaching-Learning-Evaluation
 a. e-books YES
 b. e-journals YES
 c. research database/ repositories NO
 d. IT enabled classroom YES
 e. Online assignment NO
 f. Online assessment NO
 g. Online feedback NO

7] Weekly class hour per course (average): 04 hours per course

8] Whether remedial/ tutorial classes included in class routine? YES

9] Does the programme offered has scope of Internship/Project/Field work/Seminar presentation/ Industrial training? YES

10] Does the department follow progressive evaluation of students? YES

11] Number of students appeared and passed in the academic year:

	APPEARED	PASS OUT
B TECH	53	41
M TECH	03	01

Research output (for the academic year: 2023-24)

- 1] Does the department offer MPhil/ PhD/ Post-Doctoral Programme: (Please specify): YES, Ph.D
- 2] Number of students/ scholars registered/ enrolled in MPhil/ PhD/ Post-Doctoral Programme (If the answer to Q1 is yes): 1 (Admitted against PhD advertisement 2023-2024)
- 3] Number of publications in refereed & peer-reviewed journals: 10
- 4] Number of book/ edited-volume/ book-chapter published with ISBN: 05+08(Conf)
- 5] Number of patents registered: 03
- 6] Number of revenue generating events (Consultancy, Training Programme, MDP/ EDP etc.): NONE
- 7] Number of Seminar/ Conference/ Workshop/ FDP etc organised at State/ National/ International level: 01
- 8] Number of sponsored research projects: NONE
 a. Completed
 b. Ongoing

- 9] Number of collaborative research projects: None
 a. Completed
 b. Ongoing

10] Any innovative research initiative adopted and implemented (please specify): NONE

Infrastructure & facilities (departmental level)

- 1] Number of classrooms: 6
- 2] Number of ICT-enabled classrooms: 1
- 3] Number of laboratories: 12
- 4] Availability of licensed software/ databases: OptiSystem 19.0, Ansys HFSS and Matlab, XILINX ISE 14.5, Tanner EDA v16, NETSIM 13.2.
- 5] Number of tutorial rooms: 1
- 6] Number of seminar halls: 1
- 7] Number of rooms for the teaching members: 3 (Including HoD Office)
- 8] Number of computer/ printer/ scanner available:
 a. In laboratory : 89
 b. In teachers' enclosure: 12
 c. For Research scholars: 8
 d. For Administrative purpose: 5
- 9] Whether Internet facility available in classrooms/ laboratory/ teachers' enclosure? YES
- 10] Whether reprographic facility available? YES
- 11] Number of washroom facility (for male): 04
- 12] Number of washroom facility (for female): 04
- 13] Presence of appropriate signage: YES
- 14] Barrier free environment ensured? YES

Initiatives and Supplementation for Students:

- 1] Whether Mentorship (Teacher-driven) for students is in place? YES
- 2] Do the students participate in extra-academic activities and pursue Co-curricular activities? YES
- 3] Does the department arrange Industry-visit/ Industrial lecture/Field-trips/Excursions/ Archaeological trips/ Exhibitions etc. for students? YES
- 4] Does the department arrange seminars/ workshops/skill-development programmes etc. for students? YES

- 5] Does the department arrange programmes for the students focusing Soft-skill and Personality development? YES
- 6] Does the department have any Student Forum/ Club/ Chapter etc.? NO
- 7] Does the department have a students' feedback mechanism in place? YES
- 8] Are the students provided with Training and Placement support? YES
- 9] Do the students receive ICT-based teaching? YES
- 10] Can the students access digital resources offered by the University library? YES
- 11] Please indicate the number of students those have qualified for NET/SET/GATE/GMAT/SLET/WBCS/UPSC or any other Competitive Exam (for the specific period): 02
- 12] Please indicate the number of students those have progressed for higher studies (for the specific period): 14
- 13] Please indicate the number of students those were offered placements by the University (for the specific period): 17