

# MASTER

The  
**Faculty of Engineering**  
confers upon

**Md. Saidul Islam**  
Date of Birth: 11 October 1992

after having completed all requirements and examinations in

**Materials Science and Engineering**

the Degree of  
**Master of Science (M.Sc.)**



Kiel, 25 March 2024

Prof. Dr. Lorenz Kienle  
Vice Dean



# Bangladesh University of Engineering & Technology Dhaka

## CERTIFICATE

In accordance with the statutes of the University

***Md. Saidul Islam***

having satisfactorily fulfilled all the academic requirements and having received the approval of the Syndicate is hereby awarded, with all the rights and privileges pertaining thereto, the degree of

## **BACHELOR OF SCIENCE IN MATERIALS AND METALLURGICAL ENGINEERING**

He / She fulfilled all the requirements for the degree in the month of ***February, 2017*** . His / Her grade point average is ***2.94*** on a scale of 4.0.

This certificate is signed under the seal of the University on ***19 March, 2019*** .

*[Signature]*

Vice-Chancellor

*[Signature]*

Registrar

*[Signature]*

Controller of Examinations



# BOARD OF INTERMEDIATE AND SECONDARY EDUCATION, DHAKA

BANGLADESH

Serial No. DBH 0017914

DBCHC 10011159



Registration No. 793634/2008

HIGHER SECONDARY CERTIFICATE EXAMINATION,

2010

This is to Certify that Md. Saidul Islam

Son / Daughter of Nurul Islam Mir

and Manowara Begum

of Stanford College

bearing Roll

Dhaka

No.

10 20 19

duly passed the

Higher Secondary Certificate (HSC) Examination in

Science

group and secured

G.P.A 5.00 on a scale of 5.00.

Dhaka

Date of Publication of Results : 15 July, 2010.

Controller of Examinations

Note: This Certificate is issued without any alteration or erasure.



## TRANSCRIPT OF RECORDS

Family Name: Islam  
 First Name(s): Md. Saidul  
 Date of Birth: 10.11.1992  
 Date of Registration: 09.10.2019  
 Registration Number: 1152127  
 Subject of Study: Materials Science and Engineering  
 Degree: Master of Science (M.Sc.)

Module Name / Examination	Grade	CP
<b>Materials Science and Engineering</b>	<b>2.2</b>	<b>120</b>
Master's Thesis	2.8	30
Application of Sparse Identification of Non-Linear Dynamics (SINDy) and Artificial Neural Network (ANN) algorithm, for Magnetoelectric Sensor/Actuator Modelling		
<b>Compulsory Modules</b>	<b>2.4</b>	<b>58</b>
Solid State Physics	2.0	8
Written Examination: Solid State Physics 1+ 2	2.0	
Analytics 1	3.0	4
Written or Oral Examination: Analytics 1	3.0	
Analytics 2	2.0	4
Written or Oral Examination: Analytics 2	2.0	
Advanced Materials A	2.3	8
Written or Oral Examination: Advanced Materials A	2.3	
Advanced Materials - Polymers	3.7	4
Written or Oral Examinations: Advanced Materials - Polymers	3.7	
Advanced Materials - Electronic Materials 2	3.7	4
Written or Oral Examinations: Advanced Materials - Electronic Materials 2	3.7	
Advanced Mathematics	2.7	6
Written or Oral Examination: Advanced Mathematics	2.7	
Thermodynamics and Kinetics 1	1.7	4
Written or Oral Examination: Thermodynamics and Kinetics 1	1.7	
Thermodynamics and Kinetics 2	1.7	4
Written Examination: Thermodynamics and Kinetics 2	1.7	
Master Lab 1	n. g.	4
8 Certificate: Master Lab 1	n. g.	
Master Lab 2	n. g.	4
8 Certificate: Master Lab 2	n. g.	
Master Lab 3	n. g.	4
8 Certificate: Master Lab 3	n. g.	
<b>Technical Elective Modules</b>	<b>1.7</b>	<b>27</b>
Semiconductors and Defects	2.3	5
Written or Oral Examination: Semiconductors and Defects	2.3	
Advanced Metallic Materials	2.3	3
Presentation with Written Summery: Advanced Metallic Materials	2.3	
Numerical modeling using COMSOL Multiphysics software	1.7	3
Seminar Paper with Written Report: Numerical modeling using COMSOL Multiphysics software	1.7	

Transcript of Records Md. Saidul Islam

Module Name / Examination	Grade	CP
Computational Modeling of Inelastic Material Behavior	1.3	5
Written or Oral Examination: Computational Modeling of Inelastic Material Behavior	1.3	
Finite Element Methods	1.3	7
Written or Oral Examination: Finite Element Methods	1.3	
Advanced Continuum Mechanics	2.0	5
Written or Oral Examination: Advanced Continuum Mechanics	2.0	
Non-technical Elective Modules	1.0	5
German as a Foreign Language A1.1 (CEFR)	1.0	5
Cumulative Examination: German as a Foreign Language A1.1 (CEFR)	1.0	
<b>Total number of Credit Points awarded</b>		<b>120</b>
<b>Final Grade</b>	<b>Good (2.2)</b>	

Kiel, 25 March 2024

Faculty of Engineering  
Kiel University  
- Examination Office -  
Materials Science  
Kaiserstr. 2 D-24145 Kiel

p. p. Christiane Otte-Hüls  
Technische Fakultät  
Prüfungsamt Materialwissenschaft

**Legend:**

CP: Credit Points according to the European Credit Transfer System (ECTS)  
n. g.: Module / examination passed but not graded

**Grades:**

up to and including 1.5 = Excellent; from 1.6 up to and including 2.5 = Good; from 2.6 up to and including 3.5 = Satisfactory; from 3.6 up to and including 4.0 = Sufficing.



# BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

## TRANSCRIPT OF ACADEMIC RECORD

Name : **Md. Saidul Islam**  
 Student Number : **1011022**  
 Date of Birth : **October 11, 1992**  
 Degree Awarded : **Bachelor of Science in Materials and Metallurgical Engineering**  
 abbreviated as **B.Sc.Engg.(MME)**

Sessions Attended<sup>1</sup> : **2010-11 to 2014-15**

Date of completion of the degree requirements : **February, 2017**

Minimum number of Credits required for Degree: **160.00**

Total number of Credits earned by the student : **160.00**

Grade Point Average (GPA)<sup>2</sup> earned : **2.94**

Highest GPA in the class : **3.96**

Number of students in the graduating class : **53**

Merit position of the student : **48**

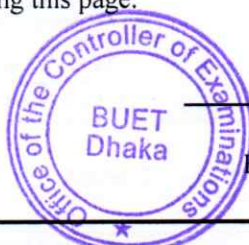
Number of graduates in the class with GPA more than the GPA of this student : **47**

This Transcript contains five pages including this page.

Date Prepared : 04/12/2017

Prepared by : [Signature]

Verified by : [Signature]



[Signature]

Controller of Examinations

Bangladesh University of Engineering & Technology  
DHAKA

1. It may be noted that there is an anomaly regarding "Sessions Attended" and "Date of completion of degree requirements". The anomaly has arisen due to delay in starting an academic session and extension of the academic calendar beyond the stipulated calendar year due to various reasons. Students are normally expected to complete degree requirements within four/five academic sessions which may extend over more than four/five calendar years.

2. **Grade Point Average (GPA) =** 
$$\frac{\sum CiGi}{\sum Ci} = \frac{\text{Summation of (Number of Credits in a Course X Grade Point Earned in that Course)}}{\text{Total Number of Credits Earned}}$$

Maximum Attainable GPA = 4.00

GPA Required for Degree with HONOURS = 3.75

Minimum GPA Required for Award of Degree = 2.20

### Grading System

Letter Grade	Grade Point	Numerical Equivalent
A+	4.00	80% and above
A	3.75	75% to below 80%
A-	3.50	70% to below 75%
B+	3.25	65% to below 70%
B	3.00	60% to below 65%
B-	2.75	55% to below 60%

Letter Grade	Grade Point	Numerical Equivalent
C+	2.50	50% to below 55%
C	2.25	45% to below 50%
D	2.00	40% to below 45%
F	0.00	Less than 40%
X	Continuation	
S	Satisfactory	





# BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

## Details of Academic Record

Name: **Md. Saidul Islam**Student Number: **1011022**

### Session 2010-11

### Level-1 Term-1 (February, 2011-September, 2011)

Course No	Course Title	Credits	Grade	Grade Point
CHEM 107	Inorganic and Physical Chemistry	3.00	B	3.00
CHEM 114	Inorganic Quantitative Analysis	1.50	A	3.75
EEE 155	Electrical Engineering Fundamentals	3.00	A+	4.00
EEE 156	Electrical Engineering Fundamentals Sessional	1.50	A	3.75
MATH 171	Calculus and Differential Equation	3.00	B	3.00
MME 131	Introduction to Metallurgy and Materials	3.00	B+	3.25
PHY 102	Physics Sessional I	1.50	A-	3.50
PHY 103	Optics, Waves and Oscillation	3.00	B+	3.25

Credit Earned: 19.50

Term GPA: 3.38

Cummulative Credits: 19.50

Cummulative GPA: 3.38

### Session 2010-11

### Level-1 Term-2 (August, 2011-April, 2012)

Course No	Course Title	Credits	Grade	Grade Point
CHEM 121	Organic Chemistry	3.00	B+	3.25
CHEM 122	Organic Chemistry Sessional	1.50	A+	4.00
HUM 101	English	3.00	B	3.00
MATH 173	Vector Analysis and Matrices	3.00	B	3.00
ME 141	Engineering Mechanics	3.00	B	3.00
ME 160	Mechanical Engineering Drawing I	1.50	B-	2.75
MME 138	Introduction to Computing	1.50	A	3.75
PHY 113	Properties of Matter, Electricity and Magnetis and Modern Physics	3.00	C	2.25
SHOP 182	Machine Shop, Sheet Metal and Carpentry	1.50	A+	4.00

Credit Earned: 21.00

Term GPA: 3.11

Cummulative Credits: 40.50

Cummulative GPA: 3.24

### Session 2011-12

### Level-2 Term-1 (April, 2012-February, 2013)

Course No	Course Title	Credits	Grade	Grade Point
MATH 271	Numerical Analysis, Statistics and Partial Differential Equations	4.00	D	2.00
ME 243	Mechanics of Solids	3.00	F	0.00
ME 260	Mechanical Engineering Drawing II	1.50	B-	2.75
MME 211	Crystallography and Structure of Materials	2.00	B-	2.75
MME 212	Crystallography and Structure Sessional	0.75	C+	2.50
MME 222	Materials Testing Sessional	1.50	B	3.00
MME 231	Materials Thermodynamics	3.00	F	0.00
MME 241	Fuels and Combustions	3.00	D	2.00
MME 242	Fuels and Combustions Sessional	1.50	A-	3.50

Credit Earned: 14.25

Term GPA: 2.47

Cummulative Credits: 54.75

Cummulative GPA: 3.04

Date Prepared

04/12/2017

Prepared by

Verified by



Controller of Examinations  
Bangladesh University of Engineering & Technology  
DHAKA



# BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

## Details of Academic Record

Name: **Md. Saidul Islam**Student Number: **1011022**Session **2011-12**

Level-2 Term-2 (February, 2013-November, 2013)

Course No	Course Title	Credits	Grade	Grade Point
EEE 267	Electrical and Electronic Technology	3.00	A	3.75
HUM 103	Economics	3.00	A	3.75
ME 221	Elements of Fluid Mechanics and Machinery	3.00	C+	2.50
MME 213	Phase Diagrams and Transformation	4.00	B+	3.25
MME 214	Metallography	1.50	B	3.00
MME 230	Materials and Metallurgical Analysis	1.50	C+	2.50
MME 235	Heat and Mass Transfer	3.00	D	2.00
MME 238	Computer Application to Metallurgy and Materials	1.50	A-	3.50

Credit Earned: 20.50

Term GPA: 3.05

Cumulative Credits: 75.25

Cumulative GPA: 3.04

Session **2012-13**

Level-3 Term-1 (November, 2013-July, 2014)

Course No	Course Title	Credits	Grade	Grade Point
MME 321	Crystal Defects, Deformation and Fracture	3.00	C	2.25
MME 325	Corrosion and Degradation of Materials	3.00	B-	2.75
MME 338	Application of CAD to Materials Processing	0.75	B-	2.75
MME 340	Communication Techniques	0.75	B-	2.75
MME 341	Refractories and Furnaces	3.00	B	3.00
MME 342	Refractories and Furnaces Sessional	1.50	A-	3.50
MME 351	Principles of Ore Dressing and Extractive Metallurgy	3.00	B	3.00
MME 354	Chemical Metallurgy Sessional	1.50	B-	2.75
MME 449	Ferrous Production Metallurgy	4.00	B+	3.25

Credit Earned: 20.50

Term GPA: 2.90

Cumulative Credits: 95.75

Cumulative GPA: 3.01

Session **2012-13**

Level-3 Term-2 (July, 2014-February, 2015)

Course No	Course Title	Credits	Grade	Grade Point
HUM 305	Economics of Development and Planning	2.00	A+	4.00
MME 343	Surface Engineering of Materials	3.00	B	3.00
MME 344	Surface Engineering of Materials Sessional	0.75	A	3.75
MME 345	Foundry Engineering	4.00	D	2.00
MME 346	Foundry Engineering Sessional	1.50	A-	3.50
MME 347	Metal Joining Technology	3.00	B-	2.75
MME 348	Metal Joining Technology Sessional	1.50	A-	3.50
MME 365	Ceramics and Glass Engineering	3.00	A-	3.50
MME 366	Ceramics and Glass Engineering Sessional	0.75	B	3.00

Credit Earned: 19.50

Term GPA: 3.04

Cumulative Credits: 115.25

Cumulative GPA: 3.02

Date Prepared

04/12/2017

Prepared by

Verified by



Controller of Examinations  
Bangladesh University of Engineering & Technology  
DHAKA





# BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

## Details of Academic Record

Name: **Md. Saidul Islam**Student Number: **1011022**

### Session 2013-14

### Level-4 Term-1 (January, 2015-September, 2015)

Course No	Course Title	Credits	Grade	Grade Point
IPE 491	Engineering Management	3.00	B	3.00
MME 300	Industrial Training	0.00	S	
MME 323	Physical Properties of Materials	3.00	B-	2.75
MME 400	Thesis	1.50	X	---
MME 411	Principles of Materials Characterisation	3.00	C+	2.50
MME 440	Materials Processing Plant Design	0.75	C	2.25
MME 443	Physical Metallurgy of Steel and Heat Treatment	3.00	A-	3.50
MME 444	Heat Treatment and Microstructure Sessional	1.50	B+	3.25
MME 475	Polymers and Composites	3.00	B	3.00
MME 476	Polymers and Composites Sessional	0.75	D	2.00

Credit Earned: 18.00

Term GPA: 2.91

Cumulative Credits: 133.25

Cumulative GPA: 3.00

### Session 2013-14

### Level-4 Term-2 (July, 2015-March, 2016)

Course No	Course Title	Credits	Grade	Grade Point
IPE 483	Production Planning and Control	3.00	C+	2.50
MME 400	Thesis	3.00 [+ 1.50]	B-	2.75
MME 442	Failure of Materials and Artefact Study	1.50	C+	2.50
MME 445	Metallic Alloys and Materials Selection	3.00	B-	2.75
MME 447	Industrial Metal Working Processes	3.00	F	0.00
MME 457	Powder Metallurgy	2.00	B+	3.25
MME 458	Metal Forming Sessional	0.75	B-	2.75
MME 467	Ceramics for Advanced Applications	3.00	C	2.25

Credit Earned: 17.75

Term GPA: 2.66

Cumulative Credits: 151.00

Cumulative GPA: 2.96

### Session 2013-14

### Level-4 Term-2 (July, 2015 (ISupp)-May, 2016)

Course No	Course Title	Credits	Grade	Grade Point
MME 447	Industrial Metal Working Processes	3.00	C	2.25

Credit Earned: 03.00

Term GPA: 2.25

Cumulative Credits: 154.00

Cumulative GPA: 2.95

### Session 2014-15

### Level-4 Term-1 (January, 2016-August, 2016)

Course No	Course Title	Credits	Grade	Grade Point
MATH 271	Numerical Analysis, Statistics and Partial Differential Equations	4.00	C	2.25
ME 243	Mechanics of Solids	3.00	F	0.00
MME 231	Materials Thermodynamics	3.00	C	2.25

Credit Earned: 07.00

Term GPA: 2.25

Cumulative Credits: 157.00

Cumulative GPA: 2.94

Date Prepared

04/12/2017

Prepared by

Verified by



*[Signature]*  
 Controller of Examinations  
 Bangladesh University of Engineering & Technology  
 DHAKA



# BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

## Details of Academic Record

Name: Md. Saidul Islam

Student Number: 1011022

Session 2014-15

Level-4 Term-1 (January, 2016 (ISupp)-November, 2016)

Course No	Course Title	Credits	Grade	Grade Point
ME 243	Mechanics of Solids	3.00	F	0.00

Credit Earned: 00.00

Term GPA: 0.00

Cummulative Credits: 157.00

Cummulative GPA: 2.94

Session 2014-15

Level-4 Term-2 (July, 2016-February, 2017)

Course No	Course Title	Credits	Grade	Grade Point
ME 243	Mechanics of Solids	3.00	B-	2.75

Credit Earned: 03.00

Term GPA: 2.75

Cummulative Credits: 160.00

Cummulative GPA: 2.94

Date Prepared

04/12/2017

Prepared by

Verified by



*Signature*

Controller of Examinations  
Bangladesh University of Engineering & Technology  
DHAKA



# BOARD OF INTERMEDIATE AND SECONDARY EDUCATION, DHAKA.

BANGLADESH

Higher Secondary Certificate Examination, 2010

Serial No. DBH **0011240**

DBCH **10011159**



## ACADEMIC TRANSCRIPT

Letter Grade	Class Interval	Grade Point
A+	80-100	5
A	70-79	4
A-	60-69	3.5
B	50-59	3
C	40-49	2
D	33-39	1
F	00-32	0

Name of Student : *Md. Saidul Islam*

Father's Name : *Nurul Islam Mir*

Mother's Name : *Manowara Begum*

Name of Institution : *Stamford College*

Name of Centre : *Dhaka - 10, New Model Degree College*


Roll No. : **10 20 19**

Registration No. : **793634 / 2008**

Group : *Science*

Type of Student : *Regular*

SL. No.	Name of Subjects	Letter Grade	Grade Point	GPA (without additional subject)	GPA
1	Bangla	A	4	4.60	5.00
2	English	A	4		
3	Mathematics	A+	5		
4	Physics	A+	5		
5	Chemistry	A+	5		
Additional Subject :					
6	Biology	A+	5	GP above 2	
				3.0	

  
Controller of Examinations

Date of Publication of Results : 15 July 2010





Manufacturers of Alloy Steel Casting, Specialized Steel,  
High Strength Deformed Bars & Wire Rod in Auto  
Re-Rolling Mill and Ship Breakers.

রহিম ষ্টীল মিলস কোঃ (প্রাঃ) লিমিটেড  
**Rahim Steel Mills Co. (Pvt) Ltd.**

**EXPERIENCE CERTIFICATE**

**Date: 05/02/2018**

**To Whomsoever It May Concern**

This is to certify that Mr. Md. Saidul Islam was employed with Rahim Group of Industries (Pvt.) Ltd. from 01/12/2016 to 30/01/2018 as a Quality Control Engineer at Rahim Steel Mills (Pvt.) Ltd. plant for a period of 01 year and 02 months.

His major responsibilities included conducting research on improving product quality (deformed bars of various grades, plates, angles, and channels), supervising melting parameters from metallurgical perspectives aiming at producing good quality billets according to standards, and controlling rolling parameters in order to maintain the quality of the deformed bars. He also served as an executive engineer involving comparison of different machineries for installment at different plants at Rahim Group.

His involvement in these areas is very good. During his tenure with us, he effectively handled his major responsibilities and was found to be very hard-working and productive.

We have found him to be self-starter and dynamic, duty bound, and a highly committed team player with strong conceptual background.

We wish him success in his future endeavors.

**For Rahim Group of Industries (Pvt.) Ltd.**

Engr. Kazi Al Amin Arefin  
Head of Quality & Product Development  
Rahim Group.



Date: 04/01/2019

## TO WHOM IT MAY CONCERN

This is to certify that, **MD.Saidul Islam (Sayeed)**, has been working at **BANDAR STEEL INDUSTRIES LIMITED (BSI)** in Steel section as “**Senior Engineer**” since 1<sup>st</sup> March 2018. During this period, his services are found to be satisfactory in carrying out the job duties. His responsibilities are:

- ❖ Co-ordinate production, processing and ensuring that materials, labor or equipment are used efficiently to meet production target and quality enrichment.
- ❖ Resolve production and other problems.
- ❖ Co-ordinate and maintain production reports.
- ❖ Instruct testing, processing and make sure finished products are of prescribed quality.
- ❖ Recommend procedures for facility or equipment maintenance or modification, including the production routes.

His gross salary per month is BDT 40,000(Forty Thousands Taka only).

I wish him every success in life.

  
Engr. Md. Abdul Bari  
Manager (Steel Mill)  
Bandar Steel Industries Limited (BSI)  
Muradpur, Madanpur, Bandar, Narayanganj, Dhaka.  
Mobile: +8801717169222



