11701613064-61762

16106210

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**
(Formerly known as West Bengal University of Technology)

*Certified that*

## AMITAVA GHOSH

**bearing Regn. No. : 131170120042 of 2013-2014**

*having fulfilled all the requirements has been admitted to*

*the Degree of*

## Bachelor of Technology
## in
## Electrical Engineering

*of this University and that the degree was conferred on him/her with all the Rights and privileges thereto. In witness whereof the Signature of the Vice-Chancellor of Maulana Abul Kalam Azad University of Technology, West Bengal is hereunto affixed.*

**DGPA : 7.50**

**(Degree Grade Point Average)**

**Year of passing : 2016**

*Saikat Maitra*

*Dated :* 3rd May 2017

*Vice-Chancellor*

SL.NO.: **1532033050**

# WEST BENGAL UNIVERSITY OF TECHNOLOGY

## GRADE CARD

**For the** **SECOND YEAR B.TECH (EE) FIRST SEMESTER EXAMINATION OF 2014-2015**

**Name** **AMITAVA GHOSH**          **Roll No.** **11701613064**

**Registration No.** **131170120042 OF 2013-2014**

| Subject Code | Subjects Offered | Letter Grade | Points | Credit | Credit Points |
|---|---|---|---|---|---|
| M(CS)301 | NUMERICAL METHODS | C | 6 | 2.0 | 12.0 |
| M302 | MATHEMATICS-III | D | 5 | 4.0 | 20.0 |
| EC(EE)301 | ANALOG ELECTRONIC CIRCUITS | C | 6 | 3.0 | 18.0 |
| EC(EE)302 | DIGITAL ELECTRONIC CIRCUIT | D | 5 | 3.0 | 15.0 |
| EE301 | ELECTRIC CIRCUIT THEORY | C | 6 | 4.0 | 24.0 |
| EE302 | FIELD THEORY | C | 6 | 4.0 | 24.0 |
| EC(EE)391 | ANALOG & DIGITAL ELECTRONIC CIRCUIT | E | 9 | 2.0 | 18.0 |
| M(CS)391 | NUMERICAL METHODS | O | 10 | 1.0 | 10.0 |
| EE391 | ELECTRIC CIRCUIT THEORY | E | 9 | 2.0 | 18.0 |
| HU381 | TECHNICAL REPORT WRITING & LANGUAGE LABORATORY PRACTICE | E | 9 | 2.0 | 18.0 |
| | **Total** | | | 27 | 177 |

| | | DGPA |
|---|---|---|
| **SGPA** | ODD (3rd) SEMESTER : 6.56 | |
| **SGPA** | | |
| **YGPA** | | |
| **Result** | | |
| **College / Institution** | RCC INSTITUTE OF INFORMATION TECHNOLOGY (117) | |

*Indranil Mukherjee*

**Controller of Examinations (Actg.)**

1. The table below shows the Letter Grades and their corresponding classification and percentage points

| Classification | Letter Grade | Score on 100 Percentage Points | Points |
|---|---|---|---|
| Outstanding | O | 100 to 90 | 10 |
| Excellent | E | 89 to 80 | 9 |
| Very Good | A | 79 to 70 | 8 |
| Good | B | 69 to 60 | 7 |
| Fair | C | 59 to 50 | 6 |
| Below Average | D | 49 to 40 | 5 |
| Failed | F | Below 40 | 2 |
| Incomplete | I | — | 2 |

2. The method calculation of Grade Point Average is as follows

$$\text{SGPA (Semester Grade Point Average)} = \frac{\text{Credit Index}}{\Sigma \text{Credits}}$$

$$\text{YGPA (Yearly Grade Point Average)} = \frac{\text{Credit Index Odd Semester} + \text{Credit Index Even Semester}}{\Sigma \text{Credits Odd Semester} + \Sigma \text{Credits Even Semester}}$$

3. For final Degree Grade Point Average (DGPA) the calculation is as under

$$\text{DGPA (For 4 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2} + 1.5^* \text{YGPA3} + 1.5^* \text{YGPA4}}{5}$$

$$\text{DGPA (For Lateral Entry Students)} = \frac{\text{YGPA2} + 1.5^* \text{YGPA3} + 1.5^* \text{YGPA4}}{4}$$

$$\text{DGPA (For 3 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2} + \text{YGPA3}}{3}$$

$$\text{DGPA (For 2 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2}}{2}$$

$$\text{DGPA (For 1 Year Degree Course)} = \text{YGPA1}$$

4. No Class / Percentage is awarded

| | | |
|---|---|---|
| X | : | Ineligible for Promotion |
| XP | : | Eligible for Promotion with Backlogs |
| P | : | Passed and Promoted |

SL.NO.: 441006711

# WEST BENGAL UNIVERSITY OF TECHNOLOGY

## GRADE CARD

**For the**   SECOND YEAR B.TECH (EE) SECOND SEMESTER EXAMINATION OF 2013-2014

**Name**   AMITAVA GHOSH                                    Roll No.   11701613064

**Registration No.**   131170120042 OF 2013-2014

| Subject Code | Subjects Offered | Letter Grade | Points | Credit | Credit Points |
|---|---|---|---|---|---|
| HU401 | VALUES AND ETHICS IN PROFESSION | D | 5 | 3.0 | 15.0 |
| PH(EE)401 | PHYSICS-II | C | 6 | 4.0 | 24.0 |
| ME(EE)411 | THERMAL POWER ENGINEERING | D | 5 | 3.0 | 15.0 |
| CH401 | BASIC ENVIRONMENTAL ENGINEERING & ELEMENTARY BIOLOGY | C | 6 | 3.0 | 18.0 |
| EE401 | ELECTRIC MACHINE-I | C | 6 | 4.0 | 24.0 |
| EE402 | ELECTRICAL & ELECTRONIC MEASUREMENT | D | 5 | 3.0 | 15.0 |
| PH(EE)491 | PHYSICS-II | E | 9 | 2.0 | 18.0 |
| ME(EE)481 | THERMAL POWER ENGINEERING LAB | A | 8 | 2.0 | 16.0 |
| EE491 | ELECTRIC MACHINE-I | E | 9 | 2.0 | 18.0 |
| EE492 | ELECTRICAL & ELECTRONIC MEASUREMENT | A | 8 | 2.0 | 16.0 |
| | | | **Total** | **28** | **179** |

| | |
|---|---|
| SGPA | ODD (3<sup></sup>rd) SEMESTER : 6.11 |
| SGPA | EVEN (4<sup></sup>th) SEMESTER : 6.39 |
| YGPA | 6.25 |
| Result | XP |

| | |
|---|---|
| DGPA | |

**College / Institution**   RCC INSTITUTE OF INFORMATION TECHNOLOGY  (117)

*Indranil Mukherjee*

**Kolkata, The**        12TH AUGUST 2014                    **Controller of Examinations (Actg.)**

1. The table below shows the Letter Grades and their corresponding classification and percentage points

| Classification | Letter Grade | Score on 100 Percentage Points | Points |
|---|---|---|---|
| Outstanding | O | 100 to 90 | 10 |
| Excellent | E | 89 to 80 | 9 |
| Very Good | A | 79 to 70 | 8 |
| Good | B | 69 to 60 | 7 |
| Fair | C | 59 to 50 | 6 |
| Below Average | D | 49 to 40 | 5 |
| Failed | F | Below 40 | 2 |
| Incomplete | I | — | 2 |

2. The method calculation of Grade Point Average is as follows

$$\text{SGPA (Semester Grade Point Average)} = \frac{\text{Credit Index}}{\Sigma \text{Credits}}$$

$$\text{YGPA (Yearly Grade Point Average)} = \frac{\text{Credit Index Odd Semester} + \text{Credit Index Even Semester}}{\Sigma \text{Credits Odd Semester} + \Sigma \text{Credits Even Semester}}$$

3. For final Degree Grade Point Average (DGPA) the calculation is as under

$$\text{DGPA (For 4 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2} + 1.5^* \text{YGPA3} + 1.5^* \text{YGPA4}}{5}$$

$$\text{DGPA (For Lateral Entry Students)} = \frac{\text{YGPA2} + 1.5^* \text{YGPA3} + 1.5^* \text{YGPA4}}{4}$$

$$\text{DGPA (For 3 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2} + \text{YGPA3}}{3}$$

$$\text{DGPA (For 2 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2}}{2}$$

$$\text{DGPA (For 1 Year Degree Course)} = \text{YGPA1}$$

4. No Class / Percentage is awarded

| | | |
|---|---|---|
| X | : | Ineligible for Promotion |
| XP | : | Eligible for Promotion with Backlogs |
| P | : | Passed and Promoted |

SL.NO.: R551002085

# WEST BENGAL UNIVERSITY OF TECHNOLOGY

## GRADE CARD

**For the** THIRD YEAR B.TECH (EE) FIRST SEMESTER EXAMINATION OF 2014-2015

**Name** AMITAVA GHOSH          **Roll No.** 11701613064

**Registration No.** 131170120042 OF 2013-2014

| Subject Code | Subjects Offered | Letter Grade | Points | Credit | Credit Points |
|---|---|---|---|---|---|
| HU 501 | ECONOMICS FOR ENGINEERS | A | 8 | 3.0 | 24.0 |
| EE501 | ELECTRIC MACHINES-II | B | 7 | 4.0 | 28.0 |
| EE502 | POWER SYSTEM-I | B | 7 | 4.0 | 28.0 |
| EE503 | CONTROL SYSTEM I | A | 8 | 4.0 | 32.0 |
| EE504C | MICROPROCESSORS & MICROCONTROLLERS | B | 7 | 3.0 | 21.0 |
| EE591 | ELECTRIC MACHINE-II | E | 9 | 2.0 | 18.0 |
| EE592 | POWER SYSTEM-I | E | 9 | 2.0 | 18.0 |
| EE593 | CONTROL SYSTEM-I | A | 8 | 2.0 | 16.0 |
| EE594C | MICROPROCESSORS & MICROCONTROLLERS | E | 9 | 2.0 | 18.0 |
| EE581 | SEMINAR | A | 8 | 2.0 | 16.0 |
| | | | Total | 28 | 219 |

| | | | |
|---|---|---|---|
| SGPA | ODD (5th) SEMESTER : 7.82 | DGPA | |
| SGPA | | | |
| YGPA | | | |
| Result | | | |

**College / Institution** RCC INSTITUTE OF INFORMATION TECHNOLOGY (117)

Indranil Mukherjee
**Controller of Examinations (Actg.)**

**Kolkata, The** 23RD JUNE 2015

1. The table below shows the Letter Grades and their corresponding classification and percentage points

| Classification | Letter Grade | Score on 100 Percentage Points | Points |
|---|---|---|---|
| Outstanding | O | 100 to 90 | 10 |
| Excellent | E | 89 to 80 | 9 |
| Very Good | A | 79 to 70 | 8 |
| Good | B | 69 to 60 | 7 |
| Fair | C | 59 to 50 | 6 |
| Below Average | D | 49 to 40 | 5 |
| Failed | F | Below 40 | 2 |
| Incomplete | I | — | 2 |

2. The method calculation of Grade Point Average is as follows

$$\text{SGPA (Semester Grade Point Average)} = \frac{\text{Credit Index}}{\Sigma \text{Credits}}$$

$$\text{YGPA (Yearly Grade Point Average)} = \frac{\text{Credit Index Odd Semester} + \text{Credit Index Even Semester}}{\Sigma \text{Credits Odd Semester} + \Sigma \text{Credits Even Semester}}$$

3. For final Degree Grade Point Average (DGPA) the calculation is as under

$$\text{DGPA (For 4 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2} + 1.5^* \text{YGPA3} + 1.5^* \text{YGPA4}}{5}$$

$$\text{DGPA (For Lateral Entry Students)} = \frac{\text{YGPA2} + 1.5^* \text{YGPA3} + 1.5^* \text{YGPA4}}{4}$$

$$\text{DGPA (For 3 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2} + \text{YGPA3}}{3}$$

$$\text{DGPA (For 2 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2}}{2}$$

$$\text{DGPA (For 1 Year Degree Course)} = \text{YGPA1}$$

4. No Class / Percentage is awarded

| | | |
|---|---|---|
| X | : | Ineligible for Promotion |
| XP | : | Eligible for Promotion with Backlogs |
| P | : | Passed and Promoted |

SL.NO : R561001261

# MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

## (Formerly known as West Bengal University of Technology)

**GRADE CARD**

For the **THIRD YEAR B.TECH (EE) SECOND SEMESTER EXAMINATION OF 2014-2015**

Name **AMITAVA GHOSH**          Roll No. **11701613064**

Registration No. **131170120042 OF 2013-2014**

| Subject Code | Subjects Offered | Letter Grade | Points | Credit | Credit Points |
|---|---|---|---|---|---|
| HU601 | PRINCIPLE OF MANAGEMENT | A | 8 | 2.0 | 16.0 |
| EE601 | CONTROL SYSTEM-II | A | 8 | 4.0 | 32.0 |
| EE602 | POWER SYSTEM-II | D | 5 | 4.0 | 20.0 |
| EE603 | POWER ELECTRONICS | D | 5 | 4.0 | 20.0 |
| EE604A | SOFTWARE ENGINEERING | A | 8 | 3.0 | 24.0 |
| EE605A | DIGITAL SIGNAL PROCESSING | C | 6 | 3.0 | 18.0 |
| EE691 | CONTROL SYSTEM-II | E | 9 | 2.0 | 18.0 |
| EE692 | POWER SYSTEM-II | E | 9 | 2.0 | 18.0 |
| EE693 | POWER ELECTRONICS | E | 9 | 2.0 | 18.0 |
| EE694A | SOFTWARE ENGINEERING | O | 10 | 2.0 | 20.0 |
| | | | Total | 28 | 204 |

| | | |
|---|---|---|
| SGPA | ODD (5th) SEMESTER : 7.82 | DGPA |
| SGPA | EVEN (6th) SEMESTER : 7.29 | |
| YGPA | 7.55 | |
| Result | P | |

College / Institution   RCC INSTITUTE OF INFORMATION TECHNOLOGY (117)

*Indranil Mukherjee*

Kolkata, The   21ST JANUARY 2016          Controller of Examinations(Actg.)

1. The table below shows the Letter Grades and their corresponding classification and percentage points

| Classification | Letter Grade | Score on 100 Percentage Points | Points |
|---|---|---|---|
| Outstanding | O | 100 to 90 | 10 |
| Excellent | E | 89 to 80 | 9 |
| Very Good | A | 79 to 70 | 8 |
| Good | B | 69 to 60 | 7 |
| Fair | C | 59 to 50 | 6 |
| Below Average | D | 49 to 40 | 5 |
| Failed | F | Below 40 | 2 |
| Incomplete | I | — | 2 |

2. The method of calculation of Grade Point Average is as follows

$$\text{SGPA (Semester Grade Point Average)} = \frac{\text{Credit Index}}{\Sigma \text{ Credits}}$$

$$\text{YGPA (Yearly Grade Point Average)} = \frac{\text{Credit Index Odd Semester + Credit Index Even Semester}}{\Sigma \text{ Credits Odd Semester} + \Sigma \text{ Credits Even Semester}}$$

3. For final Degree Grade Point Average (DGPA) the calculation is as under

$$\text{DGPA (For 4 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2} + 1.5^* \text{ YGPA3} + 1.5^* \text{ YGPA4}}{5}$$

$$\text{DGPA (For Lateral Entry Students)} = \frac{\text{YGPA2} + 1.5^* \text{ YGPA3} + 1.5^* \text{YGPA4}}{4}$$

$$\text{DGPA (For 3 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2} + \text{YGPA3}}{3}$$

$$\text{DGPA (For 2 Year Degree Course)} = \frac{\text{YGPA1} + \text{YGPA2}}{2}$$

$$\text{DGPA (For 1 Year Degree Course)} = \text{YGPA1}$$

4. $$\text{CGPA} = \frac{\text{Credit Index (All Semesters)}}{\Sigma \text{ Credits (All Semesters)}}$$

5. No Class / Percentage is awarded

| | | |
|---|---|---|
| X | : | Ineligible for Promotion |
| XP | : | Eligible for Promotion with Backlogs |
| P | : | Passed and Promoted |

SL.NO.: 167105654

# MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

## (Formerly known as West Bengal University of Technology)

### GRADE CARD

**For the** FOURTH YEAR B.TECH (EE) FIRST SEMESTER EXAMINATION OF 2015-2016

**Name** AMITAVA GHOSH  **Roll No.** 11701613064

**Registration No.** 131170120042 OF 2013-2014

| Subject Code | Subjects Offered | Letter Grade | Points | Credit | Credit Points |
|---|---|---|---|---|---|
| EE701 | ELECTRIC DRIVE | B | 7 | 4.0 | 28.0 |
| EE702 | UTILIZATION OF ELECTRIC POWER | A | 8 | 4.0 | 32.0 |
| EE703A | POWER SYSTEM-III | A | 8 | 3.0 | 24.0 |
| EE704D | RENEWABLE & NON CONVENTIONAL ENERGY | A | 8 | 3.0 | 24.0 |
| EE705A | COMPUTER NETWORK | A | 8 | 3.0 | 24.0 |
| EE781 | SEMINAR ON INDUSTRIAL TRAINING | A | 8 | 2.0 | 16.0 |
| EE791 | ELECTRIC DRIVE | E | 9 | 2.0 | 18.0 |
| EE792A | COMPUTER NETWORK | E | 9 | 2.0 | 18.0 |
| EE782 | ELECTRICAL SYSTEM DESIGN-I | E | 9 | 2.0 | 18.0 |
| EE783 | PROJECT-I | E | 9 | 2.0 | 18.0 |
| | | | **Total** | 27 | 220 |

| SGPA | ODD (7th) SEMESTER : 8.15 | DGPA |
|---|---|---|
| SGPA | | |
| YGPA | | |
| Result | | |
| College / Institution | RCC INSTITUTE OF INFORMATION TECHNOLOGY (117) | |

*Indranil Mukherjee*

**Controller of Examinations (Actg.)**

15TH MARCH 2016

Kolkata, The

1. The table below shows the Letter Grades and their corresponding classification and percentage points

| Classification | Letter Grade | Score on 100 Percentage Points | Points |
|---|---|---|---|
| Outstanding | O | 100 to 90 | 10 |
| Excellent | E | 89 to 80 | 9 |
| Very Good | A | 79 to 70 | 8 |
| Good | B | 69 to 60 | 7 |
| Fair | C | 59 to 50 | 6 |
| Below Average | D | 49 to 40 | 5 |
| Failed | F | Below 40 | 2 |
| Incomplete | I | — | 2 |

2. The method of calculation of Grade Point Average is as follows

**SGPA**
(Semester Grade Point Average)
$$SGPA = \frac{Credit\ Index}{\Sigma\ Credits}$$

**YGPA**
(Yearly Grade Point Average)
$$YGPA = \frac{Credit\ Index\ Odd\ Semester + Credit\ Index\ Even\ Semester}{\Sigma\ Credits\ Odd\ Semester + \Sigma\ Credits\ Even\ Semester}$$

3. For final Degree Grade Point Average (DGPA) the calculation is as under

**DGPA**
(For 4 Year Degree Course)
$$DGPA = \frac{YGPA1 + YGPA2 + 1.5^* YGPA3 + 1.5^* YGPA4}{5}$$

**DGPA**
(For Lateral Entry Students)
$$DGPA = \frac{YGPA2 + 1.5^* YGPA3 + 1.5^* YGPA4}{4}$$

**DGPA**
(For 3 Year Degree Course)
$$DGPA = \frac{YGPA1 + YGPA2 + YGPA3}{3}$$

**DGPA**
(For 2 Year Degree Course)
$$DGPA = \frac{YGPA1 + YGPA2}{2}$$

**DGPA**
(For 1 Year Degree Course)
$$DGPA = YGPA1$$

4. **CGPA**
$$CGPA = \frac{Credit\ Index\ (All\ Semesters)}{\Sigma\ Credits\ (All\ Semesters)}$$

5. No Class / Percentage is awarded

| | | |
|---|---|---|
| X | : | Ineligible for Promotion |
| XP | : | Eligible for Promotion with Backlogs |
| P | : | Passed and Promoted |

SL. NO. :  161170805672

# MAULANA ABUL KALAM AZAD
# UNIVERSITY OF TECHNOLOGY, WEST BENGAL
### (Formerly known as West Bengal University of Technology)

## GRADE CARD

For the     FOURTH YEAR B.Tech. (EE) SECOND SEMESTER EXAMINATION OF 2015 - 2016

Name    AMITAVA GHOSH                                    Roll No.   11701613064

Registration No.  131170120042 of 2013-2014

| Subject Code | Subjects Offered | Letter Grade | Points | Credit | Credit Points |
|---|---|---|---|---|---|
| HU801A | ORGANISATIONAL BEHAVIOUR | E | 9 | 2.0 | 18.0 |
| EE801C | ENERGY MANAGEMENT & AUDIT | B | 7 | 3.0 | 21.0 |
| EE802B | SENSORS & TRANSDUCERS | E | 9 | 3.0 | 27.0 |
| EE881 | PROJECT | A | 8 | 6.0 | 48.0 |
| EE882 | ELECTRICAL SYSTEM LAB-II | A | 8 | 4.0 | 32.0 |
| EE883 | GRAND VIVA | A | 8 | 3.0 | 24.0 |
| | | | Total | 21.0 | 170.0 |

| | | |
|---|---|---|
| SGPA | ODD  (7TH) SEMESTER : 8.15 | DGPA |
| SGPA | EVEN (8TH) SEMESTER : 8.10 | 7.50 |
| YGPA | 8.13 | |
| Result | P | |
| College / Institution | RCC INSTITUTE OF INFORMATION TECHNOLOGY (117) | |

Kolkata, The  2ND AUGUST, 2016

*Indranil Mukherjee*
Controller of Examinations (Actg.)

1. The table below shows the Letter Grades and their corresponding classification and percentage points

| Classification | Letter Grade | Score on 100 Percentage Points | Points |
|---|---|---|---|
| Outstanding | O | 100 to 90 | 10 |
| Excellent | E | 89 to 80 | 9 |
| Very Good | A | 79 to 70 | 8 |
| Good | B | 69 to 60 | 7 |
| Fair | C | 59 to 50 | 6 |
| Below Average | D | 49 to 40 | 5 |
| Failed | F | Below 40 | 2 |
| Incomplete | I | — | 2 |

2. The method of calculation of Grade Point Average is as follows

$$\text{SGPA (Semester Grade Point Average)} = \frac{\text{Credit Index}}{\Sigma \text{ Credits}}$$

$$\text{YGPA (Yearly Grade Point Average)} = \frac{\text{Credit Index Odd Semester} + \text{Credit Index Even Semester}}{\Sigma \text{ Credits Odd Semester} + \Sigma \text{ Credits Even Semester}}$$

3. For final Degree Grade Point Average (DGPA) the calculation is as under

$$\text{DGPA (For 4 Year Degree Course)} = \frac{YGPA1 + YGPA2 + 1.5^* \, YGPA3 + 1.5^* \, YGPA4}{5}$$

$$\text{DGPA (For Lateral Entry Students)} = \frac{YGPA2 + 1.5^* \, YGPA3 + 1.5^* \, YGPA4}{4}$$

$$\text{DGPA (For 3 Year Degree Course)} = \frac{YGPA1 + YGPA2 + YGPA3}{3}$$

$$\text{DGPA (For 2 Year Degree Course)} = \frac{YGPA1 + YGPA2}{2}$$

$$\text{DGPA (For 1 Year Degree Course)} = YGPA1$$

4. No Class / Percentage is awarded

| | | |
|---|---|---|
| X | : | Not eligible for Degree |
| XP | : | Eligible for Promotion with Backlogs |
| P | : | Passed and Promoted |