



PROVISIONAL AND INTERIM

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

STATEMENT OF GRADES OBTAINED FOR THE 10 SEMESTER INTEGRATED COURSE IN SCIENCE LEADING TO THE AWARD OF  
BACHELOR OF SCIENCE (HONOURS) AND MASTER OF SCIENCE



Roll No. 13PH23011

COURSE: PHYSICS (M.Sc. 5Y)

Name: ARNAB BARMAN RAY

Year of Admission : 2013-2014

Year of Graduation :

Semester 1	Name	L-T-P	CRD	GRD
PH1001	INTRODUCTION TO MANUFACTURING PROCESSES	0-0-3	2	A
PH1002	EXTRA ACADEMIC ACTIVITY-I	0-0-3	0	B
MA1001	MATHEMATICS-I	3-1-0	4	EX
MA1002	ENGLISH FOR COMMUNICATION	3-0-2	4	A
PH1003	INTRODUCTION TO PHYSICS	0-0-3	2	B
PH1004	ELECTRICAL TECHNOLOGY LAB.	3-1-0	4	C
PH1005	CHEMISTRY	3-1-0	4	A
CY1001	CHEMISTRY LAB.	0-0-3	2	A

For Semester 1 SGPA: 8.73 CGPA: 8.73

Semester 2	Name	L-T-P	CRD	GRD
PH2001	PHYSICS	3-1-0	4	C
ME2001	MECHANICS	3-1-0	4	C
MA2001	MATHEMATICS-II	3-1-0	4	B
BA2001	EXTRA ACADEMIC ACTIVITY-II	0-0-3	0	P
PH2002	PHYSICS LAB.	0-0-3	2	EX
PH2003	PROGRAMMING AND DATA STRUCTURE LAB.	0-0-3	2	D
CE2001	ENGINEERING DRAWING AND COMPUTER GRAPHICS	1-0-3	3	B
CS1001	PROLOGUE AND DATA STRUCTURE	3-1-0	4	B

For Semester 2 SGPA: 7.65 CGPA: 8.18

Semester 3	Name	L-T-P	CRD	GRD
PH3001	ENVIRONMENTAL SCIENCE	3-0-0	3	C
PH3002	ELECTROMAGNETISM & OPTICS LAB.-I	0-0-3	4	EX
EC3001	BASIC ELECTRONICS LAB.	0-0-3	2	EX
PH3003	FLUID MECHANICS AND ELASTICITY	3-0-0	3	A
PH3004	SCIENCE OF LIVING SYSTEMS	2-0-0	2	C
PH3005	THERMAL PHYSICS	3-0-0	3	A
EC3002	BASIC ELECTRONICS	3-1-0	4	EX
PH3006	ECONOMICS	3-1-0	4	A
BA3001	EXTRA ACADEMIC ACTIVITY-III	0-0-3	0	P

For Semester 3 SGPA: 8.08 CGPA: 8.63

Semester 4	Name	L-T-P	CRD	GRD
PH4001	NUCLEAR AND PARTICLE PHYSICS LAB-I	0-0-3	3	EX
PH4002	OPTICS	3-0-0	3	EX
PH4003	TECHNOLOGY ENTREPRENEURSHIP	2-1-0	3	B
PH4004	CONDENSED MATTER PHYSICS LAB-I	0-0-3	4	A
PH4005	STATISTICAL PHYSICS	3-1-0	4	B
PH4006	NUCLEAR AND PARTICLE PHYSICS-II	3-0-0	3	A
PH4007	CONDENSED MATTER PHYSICS-II	3-0-0	3	A

For Semester 4 SGPA: 8.91 CGPA: 8.61

Semester 5	Name	L-T-P	CRD	GRD
PH5001	QUANTUM MECHANICS-I	3-1-0	4	A
PH5002	MATHEMATICAL PHYSICS-I	3-1-0	4	A
PH5003	EXTRA ACADEMIC ACTIVITY-IV	0-0-3	0	P
MA5001	TRANSFORM CALCULUS	3-1-0	4	B
PH5004	GENERAL PROPERTIES & THERMAL PHYSICS LAB	0-0-3	4	A
PH5005	ELECTRODYNAMICS-I	3-1-0	4	EX

For Semester 5 SGPA: 9.05 CGPA: 8.46

Semester 6	Name	L-T-P	CRD	GRD
PH6001	QUANTUM MECHANICS-II	3-1-0	3	B
PH6002	MATHEMATICAL METHODS-II	3-1-0	3	EX
PH6003	COMPUTATIONAL METHODS	3-1-0	3	A
PH6004	NUCLEAR & PARTICLE PHYSICS LAB-II	0-0-3	2	A
PH6005	COMPUTATIONAL PHYSICS LAB.	0-0-3	2	A
PH6006	ELECTROMAGNETISM & OPTICS LAB.-III	0-0-3	2	A
PH6007	COMPREHENSIVE VIVA VOCE-I	0-0-0	2	EX
PH6008	NUCLEAR AND PARTICLE PHYSICS-I	3-1-0	3	A
PH6009	CONDENSED MATTER PHYSICS-I	3-1-0	3	C

For Semester 6 SGPA: 8.82 CGPA: 8.57

Semester 7	Name	L-T-P	CRD	GRD
PH7001	QUANTUM MECHANICS & QUANTUM COMPUTING	3-1-0	0	B

Total Additional Credit Taken: 4 Total Additional Credit Cleared: 4

CGPA in Additional Subjects: 8.00

Details of additional subjects

Upto Semester 7

Total Credit Taken: 158

Total Credit Cleared: 158

CGPA: 8.61

Date of Issue : 7 Feb 2017

Checked by

Signature of the Head of Institute  
Principal, IIT Kharagpur  
Signature of the Head of Institute  
Principal, IIT Kharagpur

## GENERAL INFORMATION

1. Abbreviations used in the grade card stands for :  
 LTP = Lecture, Tutorial, Practical; figures shown under this column indicate weekly contact hours prescribed for the Subject  
 CRD = Credit carried by the Subject  
 GRD = Grade obtained by student in the Subject  
 CGPA = Cumulative Grade Point Average  
 SGPA = Semester Grade Point Average  
 GPA = Grade Point Average
2. English is the medium of instruction at all levels.
3. Extra Academic Activity (EAA) subjects include NCC, NSS and NSO.
4. The seven point letter grade system followed by the Institute in assessing student's performance in a subject is as follows :

Performance	Letter Grade	Grade Point Value Per Credit
Excellent	EX	10
Very Good	A	9
Good	B	8
Fair	C	7
Average	D	6
Pass	P	5
Fail	F	0

5. Highest possible CGPA in the system is 10.00. No rank or class or division is awarded. No system exists for conversion of letter grades into percentage of marks.
6.
  - (i) A student is awarded a B.Tech. (Hons.)/B.Arch. (Hons.)/Dual Degree – B.Tech. (Hons.) and M.Tech./ Integrated B.Sc.(Hons.) and M.Sc. / 2Yrs. M.Sc. on completion of the curricular requirement with a minimum CGPA of 6.00.
  - (ii) The credits and grades obtained in additional subjects optionally taken by a student on satisfying the prescribed conditions do not contribute towards the CGPA.
  - (iii) The CGPA obtained by a student in additional subjects is computed separately. For the award of MINOR degree in a particular discipline, the credits and grades of the additional and other subjects that are taken into account are separately indicated along with the computed GPA.
  - (iv) Minimum GPA for a Minor in any discipline is 6.00.

### 7. Duration of Course

Minimum duration of the B.Tech. (Hons.)/B.Arch. (Hons.)/ Dual Degree – B.Tech. (Hons.) and M.Tech.(or MBA)/ B.Sc.(Hons.) and M.Sc. degree is given on the front cover page. However with the approval of the Senate a slow paced student may take more semesters to complete the degree requirement.

## INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR INDIA (721302)



Statement of

### ACADEMIC PERFORMANCE

#### Four Year Programme

#### Bachelor of Technology (Honours)

#### Five Year Programme

#### Bachelor of Architecture (Honours)

#### ✓ Master of Science (Five Year Integrated Course)

#### Bachelor of Technology (Honours)

&

#### Master of Technology/MBA (Dual Degree)

#### Two Year Programme

#### Master of Science