



भारतीय प्रौद्योगिकी संस्थान मुंबई^{१९४६}
INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
पवई / Powai, मुंबई / Mumbai 400 076



Roll Number: 185300022
Name of the Student: Abhishek Datta
Programme: Master of Science (2 Yr M.Sc)

Academic Unit: Biosciences & Bioengineering
Joining Month & Year: July 2018

Code	Name	Credits	Tag	Grade	Code	Name	Credits	Tag	Grade
Academic Year: 2018 - 2019, Term: Semester Autumn									
BB 401	Mathematical Methods for Biologists	6.0	MA	CC	BB 407	Analytical Biochemistry	6.0	MA	AB
BB 403	Biomolecular Spectroscopy	6.0	MA	AA	BB 409	Biological thermodynamics and kinetics	6.0	MA	AB
BB 405	Molecular Biology	6.0	MA	BB	BB 451	Biochemistry Laboratory	10.0	MA	BB
SPI=8.30/10					CPI=8.30/10				
Academic Year: 2018 - 2019, Term: Semester Spring									
BB 400	Molecular Biophysics	6.0	MA	BB	BB 450	Biophysics Laboratory	10.0	MA	AA
BB 402	Cell Biology	6.0	MA	AB	BB 452	Microbiology Laboratory	10.0	MA	AB
BB 404	Metabolism and Bioenergetics	6.0	MA	BB	BB 454	Programming for Bioinformatics	4.0	MA	CD
SPI=8.57/10					CPI=8.44/10				
Academic Year: 2019 - 2020, Term: Semester Autumn									
BB 503	Genetic Engineering	6.0	MA	AB	BB 553	Bioinformatics	6.0	MA	BB
BB 505	Molecular Immunology	6.0	MA	AA	BB 591	Project Stage I	4.0	MA	AA
BB 507	Molecular Enzymology	6.0	MA	CC	BB 601	Introduction to Bio-nanotechnology	3.0	MA	BB
BB 551	Genetic Engineering Laboratory	10.0	MA	AA	CPI=8.57/10				
Academic Year: 2019 - 2020, Term: Semester Spring									
BB 592	Project Stage II	24.0	MA	AB	BB 638	Topics in Evolution	6.0	MA	AB
BB 629	Applied Immunology	6.0	MA	AA	CPI=8.70/10				
SPI=9.17/10					Overall CPI				
Mandatory Course Credits (MA)					= 8.70/10				
Overall Credits Completed					= 159.0				
Overall Grade Points					= 1384.0				

Final Result

The student has completed the academic requirements of the programme in the month of June 2020 for the award of Master of Science in Biotechnology

Signature & Seal of Transcript Issuing Authority:

Joint/Assistant Registrar (Academic), IIT Bombay
Date: 05-August-2020

Place: Mumbai

प्रौद्योगिकी कुलमित्र (जोड़िका)
Sr. Assistant Registrar (Academic)
भारतीय प्रौद्योगिकी संस्थान, मुंबई^{१९४६}
Indian Institute of Technology, Bombay
पवई/मुंबई/Powai, Mumbai - 400 076



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Name of the Student: Abhishek Datta

Roll Number: 185300022

General Information

The medium of instruction at the Institute is English.

Course credits and grade: Each course is associated with credits which are an indicator of its relative weight in calculating the academic performance. A two-letter grade is awarded to students on the basis of their performance in examinations and assignments of a specific course. The letter grades have numerical equivalents on a 0-10 scale as given below.

Letter Grade	AP	AA	AB	BB	BC	CC	CD	DD	FF	FR	W	DX	PP	NP	AU
Numerical Equivalent	10	10	9	8	7	6	5	4	0	0	—	—	—	—	—

FF: Fail, FR: Fail and repeat, W: Withdrawn, DX: Insufficient attendance, AU: Satisfactory performance in an audit course, PP: Pass, NP: Not Pass. The minimum passing grade in a course is DD. The grade AP is awarded to students with exceptional performance in core courses of a programme. Numerical equivalents of letter grades are referred to as grade points.

The numerical grade points are not convertible into marks or percentages.

Performance Indicators: The performance of a student in a semester is given by a number called the Semester Performance Index (SPI), which is the weighted average of the earned grade points in the courses during the semester.

If a student has courses with credits C_1, C_2, \dots, C_n , with grade points of G_1, G_2, \dots, G_n respectively, then

Semester Credits = $C_1 + C_2 + \dots + C_n$	Semester Grade Points = $C_1 G_1 + C_2 G_2 + \dots + C_n G_n$	SPI = Semester Grade Points ÷ Semester Credits
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Cumulative Performance Index (CPI) is the weighted average of the grade points in the courses in all semesters. The indices SPI and CPI are calculated upto two decimal places.

Courses are tagged as MA: Mandatory (Core/Elective), MI: Minor, HO: Honours, AL: Additional Learning, AU: Audit

- Each degree programme has mandatory credits consisting of core courses, elective courses, and non credit courses. These courses are tagged as MA.
- For calculation of SPI and CPI, grades obtained only in mandatory courses (MA) are considered.
- Students can supplement the learning experience by crediting additional courses. Credits earned in these courses, when appropriate, can earn additional credentials either in the form of "Honours" (HO) in the chosen discipline or "Minor" (MI) in another discipline or both.
- "Honours" is not indicative of proficiency, and can be earned by completing the additional prescribed set of advanced core and elective courses in the chosen discipline. "Minor" can be earned by completing the prescribed set of courses in a discipline other than the chosen discipline. Additional courses that are not used for earning "Honours" or "Minor" are tagged as "Additional Learning" (AL).
- The AU is awarded based on satisfactory attendance and fulfilling the minimum requirements as set by the course instructor. It carries no grade points and does not figure in SPI or CPI calculations.
- PP or NP is awarded in some credit courses that are not earmarked with a letter grade. Correspondingly, PP/NP does not carry a grade point.

The Institute does not award any class or division. Notionally, the CPI may be multiplied by a factor of 10 to obtain a numerical percentage.

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END OF TRANSCRIPT

Roll Number: 185300022