



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



Date of Issue : 15-March-2025 , liable to change since student has not yet graduated

Roll Number: 210260035 Academic Unit: Engineering Physics
Name of the Student: Navdha
Programme: Bachelor of Technology (B.Tech.) Joining Month & Year: November 2021

Code	Name	Credits	Tag	Grade/ Marks	Code	Name	Credits	Tag	Grade/ Marks
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Academic Year: 2021 - 2022, Term: Semester Autumn

CH 105	Organic & Inorganic Chemistry	4.0	MA	AB	MA 111	Calculus II	4.0	MA	AB
CH 107	Physical Chemistry	4.0	MA	AA	NOCS01	NCC/NSS/NSO	0.0	MA	PP
CS 101	Computer Programming and Utilization	6.0	MA	BB	PH 107	Quantum Physics and Application	6.0	MA	AA
MA 109	Calculus I	4.0	MA	BB					

SPI=9.00/10

CPI=9.00/10

Academic Year: 2021 - 2022, Term: Semester Spring

BB 101	Biology	6.0	MA	AA	ME 119	Engineering Graphics & Drawing	5.0	MA	AA
EE 112	Introduction to Electronics	6.0	MA	AA	NOCS02	NCC/NSS/NSO	0.0	MA	PP
MA 106	Linear Algebra	4.0	MA	AA	PH 108	Basics of Electricity & Magnetism	6.0	MA	AA
MA 108	Differential Equations	4.0	MA	BB					

SPI=9.74/10

CPI=9.39/10

Academic Year: 2022 - 2023, Term: Semester Autumn

GC 101	Gender in the workplace	0.0	MA	PP	PH 215	Thermal Physics	3.0	MA	AB
HS 101	Economics	6.0	MA	AP	PH 217	Classical Mechanics	6.0	MA	AB
MA 205	Complex Analysis	4.0	MA	AA	PH 219	Data Analysis and Interpretation	6.0	MA	AA
MA 207	Differential Equations II	4.0	MA	AA	PH 231	Electronics Lab I (Basic circuits)	3.0	MA	AA
MA 403	Real Analysis	8.0	MI	AA	PH 233	Electronics Lab II (Op amp circuits)	3.0	MA	AA
PH 207	Introduction to Special Theory of Relativity	3.0	MA	AA	TA 101	Teaching Assistant Skill Enhancement & Training (TASET)	0.0	MA	PP

SPI=9.76/10

CPI=9.54/10

Academic Year: 2022 - 2023, Term: Semester Spring

EE 224	Digital Systems	6.0	MA	AA	PH 204	Quantum Mechanics I	8.0	MA	AP
MA 214	Introduction to Numerical Analysis	8.0	MA	AA	PH 230	Electronics Lab III (Digital Electronics)	5.0	MA	AA
MA 406	General Topology	8.0	MI	AA	PH 232	Physics Laboratory I (General Physics Lab)	3.0	MA	AA
PH 202	Waves & Oscillations & Optics	6.0	MA	AA	PH 544	General Theory of Relativity	6.0	HO	AB

SPI=10.00/10

CPI=9.66/10

Academic Year: 2023 - 2024, Term: Semester Autumn

HS 301	Philosophy	6.0	MA	AP	PH 423	Quantum Mechanics II	6.0	MA	AA
MA 419	Basic Algebra	8.0	MA	AP	PH 435	Electronics Lab IV (Microprocessors)	5.0	MA	AA
PH 303	Supervised Learning	6.0	MA	AA	PH 807	Current Trends in Physics	8.0	MA	AA
PH 421	Photonics	6.0	MA	AA					

SPI=10.00/10

CPI=9.75/10

Academic Year: 2023 - 2024, Term: Semester Spring

MA 412	Complex Analysis	8.0	MA	AA	PH 446	Physics Laboratory (Solid state and Nuclear Physics)	3.0	MA	AA
PH 436	Introduction to Condensed Matter Physics	6.0	MA	AA	PH 534	Quantum Information and Computing	6.0	MA	AA
PH 438	Statistical Physics	6.0	MA	AA	PH 566	Advanced Simulation Techniques in Physics	8.0	MA	AA
PH 444	Electromagnetic Theory	6.0	MA	AA					

SPI=10.00/10

CPI=9.80/10

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Name of the Student: Navdha

Roll Number : 210260035

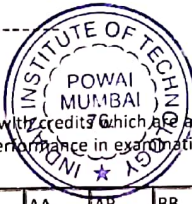
Code	Name	Credits	Tag	Grade/ Marks	Code	Name	Credits	Tag	Grade/ Marks
Academic Year: 2024 - 2025, Term: Semester Autumn									
BB 638	Topics in Evolution	6.0	AL	W	PH 517	Methods in Analytical Techniques	6.0	MA	AA
PH 447	Physics Lab (Optics and Spectroscopy)	3.0	MA	AA	PH 523	Quantum Mechanics III	6.0	AL	AA
PH 505	Introduction to Nuclear & Particle Physics	6.0	MA	AP	PH 587	B.Tech Project I	6.0	AL	AB
PH 515	Introduction to Atomic and Molecular Physics	6.0	MA	AA					
SPI= 10.00/10					CPI= 9.81/10				
Mandatory Course Credits (MA)				= 242.0	Overall CPI				= 9.81/10
Overall Credits Completed				= 276.0					
Overall Grade Points				= 2703.0					

Current Status

The academic requirements for the degree are yet to be completed.
Signature & Seal of Transcript Issuing Authority:

Navdha
12/3/25
Joint/Assistant Registrar (Academic), IIT Bombay
Date: 15-March-2025
Place: Mumbai
सहायक कुलमंचिव (शैक्षिक)
Assistant Registrar (Academic)

General Information
भारतीय प्रौद्योगिकी संस्थान, मुंबई
Indian Institute of Technology, Bombay
पवई, मुंबई / Powai, Mumbai : 400 076



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

$\text{Semester Credits} = C_1 + C_2 + \dots + C_n$	$\text{Semester Grade Points} = C_1 G_1 + C_2 G_2 + \dots + C_n G_n$	$\text{SPI} = \frac{\text{Semester Grade Points}}{\text{Semester Credits}}$
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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.
- O-IITB is/are the Course(s) completed by a student outside IIT Bombay (NPTEL/ Swayam/ Semester Exchange). These course(s) contribute towards the completion of credits for a degree requirement. However, grades/marks earned for such course(s) is/are not considered for SPI / CPI calculation.

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.
The veracity of this document can be ascertained by using the verification ticket number in the URL given at the bottom of this page.

END OF TRANSCRIPT Roll Number: 210260035

