



# Indian Institute of Technology Madras

## B.S. Termwise Progress Card

Roll No: 21F1003005 Name: PAUL M KALLARACKAL

Program: BS in Data Science and Applications



Course	Title	Cat	Cr	Gr	Course	Title	Cat	Cr	Gr
<b>FIRST TERM(JAN-APR 2021)</b>					<b>FIFTH TERM(MAY-AUG 2022)</b>				
HS1001	English I	FL	4	S	CS2007	Machine Learning Techniques	DD	4	A
CS1001	Computational Thinking	FL	4	S	CS2008	Machine Learning Practice	DD	4	B
MA1001	Mathematics for Data Science I	FL	4	A	CS2008P	Machine Learning Practice - Project	DD	2	S
MA1002	Statistics for Data Science I	FL	4	A	MS2002	Business Analytics	DD	4	A
Earned Credit : 16 GPA : 9.5 CGPA : 9.5					Earned Credit : 17 GPA : 9.06 CGPA : 9.27				
<b>SECOND TERM(MAY-AUG 2021)</b>					<b>SIXTH TERM(SEP-DEC 2022)</b>				
CS1002	Programming in Python	FL	4	S	CS3002	Software Testing	BP	4	A
HS1002	English II	FL	4	A	CS3003	AI: Search Methods for Problem Solving	BD	4	A
MA1004	Statistics for Data Science II	FL	4	A	CS3004	Deep Learning	BD	4	B
MA1003	Mathematics for Data Science II	FL	4	S	MS4001	Industry 4.0	HM	4	B
Earned Credit : 16 GPA : 9.5 CGPA : 9.5					Earned Credit : 16 GPA : 8.5 CGPA : 9.14				
<b>THIRD TERM(SEP-DEC 2021)</b>					<b>SEVENTH TERM(MAY-AUG 2023)</b>				
CS2001	Database Management Systems	DP	4	A	CS3001	Software Engineering	BP	4	A
CS2002	Programming, Data Structures and Algorithms using Python	DP	4	B	GN3001	Strategies for Professional Growth	HM	4	A
CS2003	Modern Application Development I	DP	4	A	MS3002	Market Research	HM	4	S
CS2004	Machine Learning Foundations	DD	4	A	MS4003	Financial Forensics	HM	4	A
Earned Credit : 16 GPA : 8.75 CGPA : 9.25					Earned Credit : 16 GPA : 9.25 CGPA : 9.16				
<b>FOURTH TERM(JAN-APR 2022)</b>					<b>EIGHTH TERM</b>				
CS2005	Programming Concepts using Java	DP	4	A	NPTEL	Theory of Computation	BP	2	
CS2006	Modern Application Development II	DP	4	S	NPTEL	Object Oriented Analysis and Design	BP	2	
MS2001	Business Data Management	DD	4	S					
SE2001	System Commands	DP	3	A					
Earned Credit : 15 GPA : 9.53 CGPA : 9.32									

### Cumulative Grade Point Average (CGPA) Summary

Cat	Foundation Level (FL)	Diploma - Programming (DP)	Diploma - Data Science (DD)	Degree - Programming (BP)	Degree - Data Science (BD)	Humanities and Management (HM)	Science and Engineering (SE)	Total
Min. Required Credits	32	23	23	16	16	8	0	142
Earned Credits	32	23	25	8	8	16	0	112
Transferred Credits $\Phi$	-	-	-	-	-	-	-	-
CGPA	9.5	9.0	9.2	9	8.5	9	0	9.16

$\Phi$  Transfer Credits are not considered for CGPA calculation. Transferred Credits + Earned Credits should meet the total credit requirement.

Coordinator  
IIT Madras BS Program

Date: 27 October 2023

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## Degree in Data Science and Applications (B.S.)

Grade		Remarks
Code	Points	
<b>S</b>	<b>10</b>	---
<b>A</b>	<b>9</b>	---
<b>B</b>	<b>8</b>	---
<b>C</b>	<b>7</b>	---
<b>D</b>	<b>6</b>	---
<b>E</b>	<b>4</b>	---
<b>U</b>	<b>0</b>	---
<b>P</b>	<b>0</b>	Pass
<b>F</b>	<b>0</b>	Fail
<b>W</b>	<b>0</b>	Not eligible for End Term Exam
<b>I</b>	<b>0</b>	Absent for End Term Exam

Grades 'S' to 'E' and 'P' indicate successful completion of course.  
Courses with grade 'I', 'P' or 'F' do not count towards GPA or CGPA calculation.

For award of Degree, the student has to earn the minimum credits mentioned under the "Total" and also satisfy the category-wise credit requirement as per CGPA summary table in the front page.

$$\text{GPA} = \frac{\sum_i (C_i \times \text{GP})}{\sum_i C_i}$$

where  $C_i$  = credit of the course

GP = Grade point based on the letter grade obtained for the course

$\sum_i C_i$  = the sum of credits of all courses taken in that term, including those in which the learner has secured U / W grades.

For the cumulative grade point average (CGPA), a similar formula is used where the sum  $\sum_i C_i$  is the sum of credits of all courses taken in all the terms successfully completed up to that point in time.

The medium of instruction is English at this Institute

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Note: No class or Division is awarded at this Institute. However, Senate has approved the formula  
PERCENTAGE = 10 × (CGPA) for converting CGPA to percentage