

# INDIAN INSTITUTE OF TECHNOLOGY GOA

## TRANSCRIPT



ROLL NO : 170030027  
 NAME : NARESH KUMAR KAUSHAL  
 DISCIPLINE : COMPUTER SCIENCE AND ENGINEERING  
 PROGRAMME : B.TECH

Printed On :29-07-2021 15:38

YEAR / SEM	COURSE	TITLE	CREDIT	GRADE	SPI	CPI
2017-18 AUTUMN	CH105	ORGANIC CHEMISTRY AND INORGANIC CHEM	4.00	AA		
	CH107	PHYSICAL CHEMISTRY	4.00	AA		
	CH117	CHEMISTRY LAB	3.00	AB		
	CS101	COMPUTER PROGRAMMING AND UTILIZATION	8.00	BC		
	MA105	CALCULUS	8.00	AB		
	MU101	APPRECIATION OF INDIAN CLASSICAL MUSIC	0.00	PP		
	NO101	NATIONAL SPORTS ORGANISATION	0.00	PP		
	PH107	QUANTUM PHYSICS	6.00	BB	8.58	8.58
2017-18 SPRING	BB101	BIOLOGY	6.00	AA		
	CE102	ENGINEERING MECHANICS (DIC)	6.00	AA		
	MA106	LINEAR ALGEBRA	4.00	AB		
	MA108	ORDINARY DIFFERENTIAL EQUATIONS	4.00	AA		
	ME115	FUNDAMENTALS OF COMPUTER AIDED DRAWING AND MANUFACTURING	8.00	BB		
	NO102	NATIONAL SPORTS ORGANISATION	0.00	PP		
	PH108	ELECTRICITY AND MAGNETISM	6.00	AA		
	PH117	PHYSICS LAB	3.00	AA	9.46	9.04
2018-19 AUTUMN	CS207	DISCRETE STRUCTURES	6.00	BB		
	CS215	DATA ANALYTICS	6.00	AB		
	CS251	SOFTWARE SYSTEMS LAB	8.00	AB		
	EE101	INTRODUCTION TO ELECTRICAL AND ELECTRONICS CIRCUITS	8.00	AB		
	HS101	ECONOMICS	6.00	AA	9.00	9.03
2018-19 SPRING	CS113	DATA STRUCTURES AND ALGORITHMS(DIC)	6.00	AB		
	CS193	DATA STRUCTURES AND ALGORITHMS LAB	3.00	AA		
	CS216	DIGITAL LOGIC DESIGN	6.00	BB		
	CS218	DESIGN AND ANALYSIS OF ALGORITHMS	6.00	BB		
	CS254	DIGITAL LOGIC DESIGN LAB	3.00	AB		
	CS310	AUTOMATA THEORY	6.00	AB		
	CS348	COMPUTER NETWORKS	6.00	BC		
	CS378	COMPUTER NETWORKS LAB	3.00	AA		
	MA214	NUMERICAL ANALYSIS	8.00	AA	8.79	8.95

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Asst. Registrar - Academic Program

भारतीय प्रौद्योगिकी संस्थान गोवा  
 Indian Institute of Technology Goa



The medium of instruction at the Institute is English.

### Course Credit and Grade

Each academic course is associated with a credit which is an indicator of its relative academic weight in calculating the academic performance.

A two-letter grade is awarded to students on the basis of their performance in examinations and assignments. 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	DX	PP	NP	AU
Numerical Equivalent	10	10	9	8	7	6	5	4	0	0	-	-	-	-

FF: Fail

FR: Fail and repeat the course

DX: Insufficient attendance

AU: Satisfactory in an Audit course

PP: Pass in Pass/Not-Pass credit course

NP: Not Pass in Pass/Not-Pass credit course

The 'P' grade depicts notionally a PASS in a course, which will contribute to the credit requirements but will not use for SPI/CPI calculations

The minimum passing grade in a course is DD. The grade AP is awarded to students with exceptional performance in Institute core courses.

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  $G_1, G_2, G_3, \dots, G_n$  respectively, then

$$SPI = \frac{C_1G_1 + C_2G_2 + C_3G_3 + \dots + C_nG_n}{C_1 + C_2 + C_3 + \dots + C_n}$$

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 to two decimal places.

The course tag AU (Audit) indicates a course taken for exposure without undergoing the rigour involved in obtaining a grade. The grade AU indicates satisfactory attendance and fulfilling the minimum requirements as set by the course instructor. It does not carry any grade points and does not figure in SPI or CPI calculations.

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



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2019-20 AUTUMN	CS228	LOGIC IN COMPUTER SCIENCE	6.00	AA		
	CS305	COMPUTER ARCHITECTURE	6.00	AB		
	CS341	COMPUTER ARCHITECTURE LAB	3.00	BB		
	CS344	ARTIFICIAL INTELLIGENCE	6.00	AA		
	CS386	ARTIFICIAL INTELLIGENCE LAB	3.00	AA		
	CS570	MODEL CHECKING AND SOFTWARE VERIFICATION	6.00	AB		
	HS301	LANGUAGE AND SOCIETY	6.00	AA	9.50	9.06
2019-20 SPRING	CS347	OPERATING SYSTEMS	6.00	AB		
	CS360	INTRODUCTION TO DATA SCIENCE AND MACHINE LEARNING	6.00	AA		
	CS377	OPERATING SYSTEMS LAB	4.00	AB		
	CS511	APPROACHES TO SOFTWARE PERFORMANCE ENHANCEMENT	6.00	AU		
	CS513	INTRODUCTION TO INFORMATION SECURITY	6.00	AB		
	CS520	COMBINATORIAL OPTIMIZATION	6.00	AB		
	ES200	ENVIRONMENTAL STUDIES, SCIENCE AND ENGINEERING	3.00	AA		
	HS200	ENVIRONMENTAL STUDIES	3.00	AA	9.35	9.10
2020-21 AUTUMN	CS420	INTERNSHIP	24.00	AB	9.00	9.09
2020-21 SPRING	CS302	INTRODUCTION TO COMPILATION TECHNIQUES	6.00	AP		
	CS306	INTRODUCTION TO COMPILATION TECHNIQUES LAB	3.00	AP		
	CS410	BTP I	6.00	AA		
	CS411	BTP II	6.00	AA		
	IE602	INTRODUCTION TO QUANTITATIVE FINANCE	2.00	P	10.00	9.17
		CREDITS EARNED	268.00			

STUDENT HAS COMPLETED THE PROGRAMME IN JULY 2021

SIGNATURE & SEAL OF TRANSCRIPT ISSUING AUTHORITY

*Abhinav*  
 DEPUTY / ASSISTANT REGISTRAR

ACADEMIC PROGRAMME, IIT GOA

सहायक कालमन्त्रि - शैक्षिक कार्य  
 Asst. Registrar, Academic Program

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