

# TECNIA INSTITUTE OF ADVANCED STUDIES

A'GRADE INSTITUTE  
Department of Computer Science

Ref.No. TIAS/BCA/2023-24/

Dated: 20/11/2023

## IMPORTANT NOTICE

**Subject: Registration of online SWAYAM Courses approved by SWAYAM Board for Jan, 2024**

**Reference: BCA 2<sup>nd</sup> Semester; Paper Code: BCA 132; Paper MOOCs**

This is in reference to Guru Gobind Singh Indraprastha University BCA Scheme of Examination and syllabus 2021-22 onwards for Academic-Session 2023-24 onwards; registration of online SWAYAM Courses approved by SWAYAM Board for Jan, 2024.

All the students of BCA appearing for II Semester Examinations required to undertake.

Code No	Paper	Type	L	T/P	Credit
BCA 132	MOOC	Ability Enhancement	-	-	2

**Note:** *The Student is required to choose one MOOC course of 2 credits as per his/her choice from Swayam portal or any other online educational platform approved by the UGC regulatory body from time to time at UG level and after completing the course, the students have to produce successful course completion certificate for claiming the credit. The course chosen by the students should be intimated to the MOOCs coordinator of the respective institution.*

The Departmental Academic Committee recommended following MOOCs courses of 2 credit from SWAYAM portal.

All the students as above are required to mandatorily registered on SWAYAM portal before the due date and undertake the course as scheduled.



**Dr. Kapil Dev**  
**MOOCs Nodal Officer**  
**Tecnia Institute of Advanced Studies**

### **Copy to:**

Copy to: ED Sir –For information  
Director, TIAS  
Dean – DMS,  
HoDs : MCA, BCA,  
Academic Cell  
Examination Cell  
TIAS Website

Discipline		MOOCs : Computer Science				UG/PG							
Duration		4,8,12 Weeks		Onlinecourse.nptel.ac.in									
Type of course		MOOCs											
S.No.	Course Name	SME Name	Co-ordinating Institute	Duration	Start date	End date	Exam date	Enrollment End date	Exam Registration End date	Applicable NPTEL Domain	Click here to Join the course	Old course URL	Course ID
1	Foundations of Cryptography	Prof. Ashish Choudhury	IISc	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024	Foundations Of Computing	<a href="https://onlinecourses.nptel.ac.in/noc24_cs01/preview">https://onlinecourses.nptel.ac.in/noc24_cs01/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs03/preview">https://onlinecourses.nptel.ac.in/noc23_cs03/preview</a>	noc24_cs01
2	Introduction to programming in C	Prof.Satyadev Nandakumar	IITK	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs02/preview">https://onlinecourses.nptel.ac.in/noc24_cs02/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs02/preview">https://onlinecourses.nptel.ac.in/noc23_cs02/preview</a>	noc24_cs02
3	Linear programming and its applications to computer science	Prof. Rajat Mittal	IITK	8 Weeks	Feb 19, 2024	Apr 12, 2024	Apr 21, 2024	Feb 19, 2024	Mar 15, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs03/preview">https://onlinecourses.nptel.ac.in/noc24_cs03/preview</a>		noc24_cs03
4	Privacy and Security in Online Social Media	Prof. Ponnurangam Kumaraguru	IITM	12 weeks	Jan 22, 2024	Apr 12, 2024	Apr 28, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs04/preview">https://onlinecourses.nptel.ac.in/noc24_cs04/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs69/preview">https://onlinecourses.nptel.ac.in/noc23_cs69/preview</a>	noc24_cs04
5	Basics of Computational Complexity	Prof. Nitin Saxena	IITK	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 21, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs05/preview">https://onlinecourses.nptel.ac.in/noc24_cs05/preview</a>		noc24_cs05
6	Advanced Computer Architecture	Prof. Smruti Ranjan Sarangi	IITD	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 28, 2024	Jan 29, 2024	Feb 16, 2024	Systems	<a href="https://onlinecourses.nptel.ac.in/noc24_cs06/preview">https://onlinecourses.nptel.ac.in/noc24_cs06/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs07/preview">https://onlinecourses.nptel.ac.in/noc23_cs07/preview</a>	noc24_cs06
7	Secure Computation: Part I	Prof. Ashish Choudhury	IISc	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024	Foundations Of Computing	<a href="https://onlinecourses.nptel.ac.in/noc24_cs07/preview">https://onlinecourses.nptel.ac.in/noc24_cs07/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs34/preview">https://onlinecourses.nptel.ac.in/noc23_cs34/preview</a>	noc24_cs07
8	An Introduction to Artificial Intelligence	Prof. Mausam	IITD	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024	Artificial Intelligence Data Science Robotics	<a href="https://onlinecourses.nptel.ac.in/noc24_cs08/preview">https://onlinecourses.nptel.ac.in/noc24_cs08/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs05/preview">https://onlinecourses.nptel.ac.in/noc23_cs05/preview</a>	noc24_cs08
9	Cloud Computing and Distributed Systems	Prof. Rajiv Misra	IITK	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs09/preview">https://onlinecourses.nptel.ac.in/noc24_cs09/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs27/preview">https://onlinecourses.nptel.ac.in/noc23_cs27/preview</a>	noc24_cs09
10	Switching Circuits and Logic Design	Prof. Indranil Sengupta	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs10/preview">https://onlinecourses.nptel.ac.in/noc24_cs10/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc21_cs64/preview">https://onlinecourses.nptel.ac.in/noc21_cs64/preview</a>	noc24_cs10
11	Advanced Computer Networks	Prof. Neminath Hubballi Prof. Sameer Kulkarni	IITM	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs11/preview">https://onlinecourses.nptel.ac.in/noc24_cs11/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs35/preview">https://onlinecourses.nptel.ac.in/noc23_cs35/preview</a>	noc24_cs11

12	Affective Computing	Prof. Jainendra Shukla Prof. Abhinav Dhall	IITM	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024	Artificial Intelligence	<a href="https://onlinecourses.nptel.ac.in/noc24_cs12/preview">https://onlinecourses.nptel.ac.in/noc24_cs12/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs36/preview">https://onlinecourses.nptel.ac.in/noc23_cs36/preview</a>	noc24_cs12
13	AI:Constraint Satisfaction	Prof. Deepak Khemani	IITM	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024	Artificial Intelligence	<a href="https://onlinecourses.nptel.ac.in/noc24_cs13/preview">https://onlinecourses.nptel.ac.in/noc24_cs13/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs14/preview">https://onlinecourses.nptel.ac.in/noc23_cs14/preview</a>	noc24_cs13
14	Artificial Intelligence: Knowledge Representation And Reasoning	Prof. Deepak Khemani	IITM	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 27, 2024	Jan 29, 2024	Feb 16, 2024	Artificial Intelligence Data Science	<a href="https://onlinecourses.nptel.ac.in/noc24_cs14/preview">https://onlinecourses.nptel.ac.in/noc24_cs14/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs09/preview">https://onlinecourses.nptel.ac.in/noc23_cs09/preview</a>	noc24_cs14
15	Blockchain and its Applications	Prof. Sandip Chakraborty Prof. Shamik Sural	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 27, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs15/preview">https://onlinecourses.nptel.ac.in/noc24_cs15/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs47/preview">https://onlinecourses.nptel.ac.in/noc23_cs47/preview</a>	noc24_cs15
16	Circuit Complexity Theory	Prof. Raghunath Tewari	IITK	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs16/preview">https://onlinecourses.nptel.ac.in/noc24_cs16/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs37/preview">https://onlinecourses.nptel.ac.in/noc23_cs37/preview</a>	noc24_cs16
17	Cloud Computing	Prof. Soumya Kanti Ghosh	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024	Programming Systems	<a href="https://onlinecourses.nptel.ac.in/noc24_cs17/preview">https://onlinecourses.nptel.ac.in/noc24_cs17/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs89/preview">https://onlinecourses.nptel.ac.in/noc23_cs89/preview</a>	noc24_cs17
18	Compiler Design	Prof. Santanu Chattopadhyay	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 27, 2024	Jan 29, 2024	Feb 16, 2024	Systems	<a href="https://onlinecourses.nptel.ac.in/noc24_cs18/preview">https://onlinecourses.nptel.ac.in/noc24_cs18/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs57/preview">https://onlinecourses.nptel.ac.in/noc23_cs57/preview</a>	noc24_cs18
19	Computer Networks And Internet Protocol	Prof. Soumya Kanti Ghosh Prof. Sandip Chakraborty	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024	Systems	<a href="https://onlinecourses.nptel.ac.in/noc24_cs19/preview">https://onlinecourses.nptel.ac.in/noc24_cs19/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs48/preview">https://onlinecourses.nptel.ac.in/noc23_cs48/preview</a>	noc24_cs19
20	Data Analytics with Python	Prof. A Ramesh	IITR	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 27, 2024	Jan 29, 2024	Feb 16, 2024	Data Science	<a href="https://onlinecourses.nptel.ac.in/noc24_cs20/preview">https://onlinecourses.nptel.ac.in/noc24_cs20/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs08/preview">https://onlinecourses.nptel.ac.in/noc23_cs08/preview</a>	noc24_cs20
21	Data Base Management System	Prof. Partha Pratim Das Prof. Samiran Chattopadhyay	IITKGP	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 24, 2024	Jan 29, 2024	Feb 16, 2024	Programming	<a href="https://onlinecourses.nptel.ac.in/noc24_cs21/preview">https://onlinecourses.nptel.ac.in/noc24_cs21/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs79/preview">https://onlinecourses.nptel.ac.in/noc23_cs79/preview</a>	noc24_cs21

22	Data Mining	Prof. Pabitra Mitra	IITKGP	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs22/preview">https://onlinecourses.nptel.ac.in/noc24_cs22/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs43/preview">https://onlinecourses.nptel.ac.in/noc23_cs43/preview</a>	noc24_cs22
23	Design and analysis of algorithms	Prof. Madhavan Mukund	IITM	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 24, 2024	Jan 29, 2024	Feb 16, 2024	Foundations Of Computing	<a href="https://onlinecourses.nptel.ac.in/noc24_cs23/preview">https://onlinecourses.nptel.ac.in/noc24_cs23/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs96/preview">https://onlinecourses.nptel.ac.in/noc23_cs96/preview</a>	noc24_cs23
24	Embedded System Design with ARM	Prof. Indranil Sengupta Prof. Kamalika Datta	IITKGP	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024	Robotics	<a href="https://onlinecourses.nptel.ac.in/noc24_cs24/preview">https://onlinecourses.nptel.ac.in/noc24_cs24/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc22_cs93/preview">https://onlinecourses.nptel.ac.in/noc22_cs93/preview</a>	noc24_cs24
25	Embedded Systems Design	Prof. Anupam Basu	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024	Robotics	<a href="https://onlinecourses.nptel.ac.in/noc24_cs25/preview">https://onlinecourses.nptel.ac.in/noc24_cs25/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs54/preview">https://onlinecourses.nptel.ac.in/noc23_cs54/preview</a>	noc24_cs25
26	Foundation of Cloud IoT Edge ML	Prof. Rajiv Misra	IITK	8 Weeks	Feb 19, 2024	Apr 12, 2024	Apr 21, 2024	Feb 19, 2024	Mar 15, 2024	Systems	<a href="https://onlinecourses.nptel.ac.in/noc24_cs26/preview">https://onlinecourses.nptel.ac.in/noc24_cs26/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs65/preview">https://onlinecourses.nptel.ac.in/noc23_cs65/preview</a>	noc24_cs26
27	Foundations of Cyber Physical Systems	Prof. Soumyajit Dey	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 21, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs27/preview">https://onlinecourses.nptel.ac.in/noc24_cs27/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs62/preview">https://onlinecourses.nptel.ac.in/noc23_cs62/preview</a>	noc24_cs27
28	Fundamental Algorithms: Design And Analysis	Prof. Sourav Mukhopadhyay	IITKGP	4 Weeks	Jan 22, 2024	Feb 16, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs28/preview">https://onlinecourses.nptel.ac.in/noc24_cs28/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs39/preview">https://onlinecourses.nptel.ac.in/noc23_cs39/preview</a>	noc24_cs28
29	Getting Started with Competitive Programming	Prof. Neeldhara Misra	IITM	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 21, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs29/preview">https://onlinecourses.nptel.ac.in/noc24_cs29/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs103/preview">https://onlinecourses.nptel.ac.in/noc23_cs103/preview</a>	noc24_cs29
30	GPU Architectures And Programming	Prof. Soumyajit Dey	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 27, 2024	Jan 29, 2024	Feb 16, 2024	Systems	<a href="https://onlinecourses.nptel.ac.in/noc24_cs30/preview">https://onlinecourses.nptel.ac.in/noc24_cs30/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs61/preview">https://onlinecourses.nptel.ac.in/noc23_cs61/preview</a>	noc24_cs30
31	Information Security - 5 - Secure Systems Engineering	Prof. Chester Robeiro	IITM	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024	Systems	<a href="https://onlinecourses.nptel.ac.in/noc24_cs31/preview">https://onlinecourses.nptel.ac.in/noc24_cs31/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs10/preview">https://onlinecourses.nptel.ac.in/noc23_cs10/preview</a>	noc24_cs31

32	Introduction to Automata, Languages and Computation	Prof. Sourav Mukhopadhyay	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs32/preview">https://onlinecourses.nptel.ac.in/noc24_cs32/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs58/preview">https://onlinecourses.nptel.ac.in/noc23_cs58/preview</a>	noc24_cs32
33	Introduction to Embedded System Design	Prof. Dhananjay V. Gadre Prof. Badri N Subudhi	IITD	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs33/preview">https://onlinecourses.nptel.ac.in/noc24_cs33/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs06/preview">https://onlinecourses.nptel.ac.in/noc23_cs06/preview</a>	noc24_cs33
34	Introduction To Industry 4.0 And Industrial Internet Of Things	Prof. Sudip Misra	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 21, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs34/preview">https://onlinecourses.nptel.ac.in/noc24_cs34/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs82/preview">https://onlinecourses.nptel.ac.in/noc23_cs82/preview</a>	noc24_cs34
35	Introduction To Internet Of Things	Prof. Sudip Misra	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 21, 2024	Jan 29, 2024	Feb 16, 2024	Programming Systems	<a href="https://onlinecourses.nptel.ac.in/noc24_cs35/preview">https://onlinecourses.nptel.ac.in/noc24_cs35/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs83/preview">https://onlinecourses.nptel.ac.in/noc23_cs83/preview</a>	noc24_cs35
36	Introduction to Machine Learning (Tamil)	Prof. Arun Rajkumar	IITM	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 24, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs36/preview">https://onlinecourses.nptel.ac.in/noc24_cs36/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs105/preview">https://onlinecourses.nptel.ac.in/noc23_cs105/preview</a>	noc24_cs36
37	Introduction To Soft Computing	Prof. Debasis Samanta	IITKGP	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs37/preview">https://onlinecourses.nptel.ac.in/noc24_cs37/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs40/preview">https://onlinecourses.nptel.ac.in/noc23_cs40/preview</a>	noc24_cs37
38	Machine Learning for Engineering and science applications	Prof. Balaji Srinivasan and Prof. Ganapathy	IITM	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs38/preview">https://onlinecourses.nptel.ac.in/noc24_cs38/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc19_cs82/preview">https://onlinecourses.nptel.ac.in/noc19_cs82/preview</a>	noc24_cs38
39	Natural Language Processing	Prof. Pawan Goyal	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 28, 2024	Jan 29, 2024	Feb 16, 2024	Artificial Intelligence Data Science	<a href="https://onlinecourses.nptel.ac.in/noc24_cs39/preview">https://onlinecourses.nptel.ac.in/noc24_cs39/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs80/preview">https://onlinecourses.nptel.ac.in/noc23_cs80/preview</a>	noc24_cs39
40	Object Oriented System Development Using UML, Java And Patterns	Prof. Rajib Mall	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024	Programming	<a href="https://onlinecourses.nptel.ac.in/noc24_cs40/preview">https://onlinecourses.nptel.ac.in/noc24_cs40/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs46/preview">https://onlinecourses.nptel.ac.in/noc23_cs46/preview</a>	noc24_cs40
41	Optimisation for Machine Learning: Theory and Implementation (Hindi)	Prof. Pravesh Biyani	IITM	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 24, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs41/preview">https://onlinecourses.nptel.ac.in/noc24_cs41/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs64/preview">https://onlinecourses.nptel.ac.in/noc23_cs64/preview</a>	noc24_cs41

42	Problem Solving Through Programming In C	Prof. Anupam Basu	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 21, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs42/preview">https://onlinecourses.nptel.ac.in/noc24_cs42/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs121/preview">https://onlinecourses.nptel.ac.in/noc23_cs121/preview</a>	noc24_cs42
43	Programming In Java	Prof. Debasis Samanta	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 27, 2024	Jan 29, 2024	Feb 16, 2024	Programming	<a href="https://onlinecourses.nptel.ac.in/noc24_cs43/preview">https://onlinecourses.nptel.ac.in/noc24_cs43/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs74/preview">https://onlinecourses.nptel.ac.in/noc23_cs74/preview</a>	noc24_cs43
44	Programming in Modern C++	Prof. Partha Pratim Das	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 28, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs44/preview">https://onlinecourses.nptel.ac.in/noc24_cs44/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs78/preview">https://onlinecourses.nptel.ac.in/noc23_cs78/preview</a>	noc24_cs44
45	Programming, Data Structures And Algorithms Using Python	Prof. Madhavan Mukund	IITM	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 24, 2024	Jan 29, 2024	Feb 16, 2024	Artificial Intelligence Computational Biology Data Science Foundations Of Computing Programming	<a href="https://onlinecourses.nptel.ac.in/noc24_cs45/preview">https://onlinecourses.nptel.ac.in/noc24_cs45/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs95/preview">https://onlinecourses.nptel.ac.in/noc23_cs95/preview</a>	noc24_cs45
46	Selected Topics in Algorithms	Prof. Palash Dey	IITKGP	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs46/preview">https://onlinecourses.nptel.ac.in/noc24_cs46/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs63/preview">https://onlinecourses.nptel.ac.in/noc23_cs63/preview</a>	noc24_cs46
47	Software Testing	Prof. Rajib Mall	IITKGP	4 Weeks	Jan 22, 2024	Feb 16, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs47/preview">https://onlinecourses.nptel.ac.in/noc24_cs47/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs38/preview">https://onlinecourses.nptel.ac.in/noc23_cs38/preview</a>	noc24_cs47
48	Systems and Usable Security	Prof. Neminath Hubballi	IITM	4 Weeks	Jan 22, 2024	Feb 16, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs48/preview">https://onlinecourses.nptel.ac.in/noc24_cs48/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs32/preview">https://onlinecourses.nptel.ac.in/noc23_cs32/preview</a>	noc24_cs48
49	Theory of Computation	Prof. Subrahmanyam Kalyanasundaram	IITM	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 20, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs49/preview">https://onlinecourses.nptel.ac.in/noc24_cs49/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs31/preview">https://onlinecourses.nptel.ac.in/noc23_cs31/preview</a>	noc24_cs49
50	User-centric Computing For Human-Computer Interaction	Prof. Samit Bhattacharya	IITG	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 23, 2024	Jan 29, 2024	Feb 16, 2024		<a href="https://onlinecourses.nptel.ac.in/noc24_cs50/preview">https://onlinecourses.nptel.ac.in/noc24_cs50/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs25/preview">https://onlinecourses.nptel.ac.in/noc23_cs25/preview</a>	noc24_cs50



51	Introduction to Machine Learning	Prof. Balaraman Ravindran	IITM	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 21, 2024	Jan 29, 2024	Feb 16, 2024	Artificial Intelligence Data Science Programming Robotics	<a href="https://onlinecourses.nptel.ac.in/noc24_cs51/preview">https://onlinecourses.nptel.ac.in/noc24_cs51/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs98/preview">https://onlinecourses.nptel.ac.in/noc23_cs98/preview</a>	noc24_cs51
52	Reinforcement Learning	Prof. Balaraman Ravindran	IITM	12 Weeks	Jan 22, 2024	Apr 12, 2024	Apr 21, 2024	Jan 29, 2024	Feb 16, 2024	Artificial Intelligence Data Science Robotics	<a href="https://onlinecourses.nptel.ac.in/noc24_cs52/preview">https://onlinecourses.nptel.ac.in/noc24_cs52/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs100/preview">https://onlinecourses.nptel.ac.in/noc23_cs100/preview</a>	noc24_cs52
53	Data Science for Engineers	Prof. Ragunathan Rengasamy Prof. Shankar Narasimhan	IITM	8 Weeks	Jan 22, 2024	Mar 15, 2024	Mar 24, 2024	Jan 29, 2024	Feb 16, 2024	Data Science Programming	<a href="https://onlinecourses.nptel.ac.in/noc24_cs53/preview">https://onlinecourses.nptel.ac.in/noc24_cs53/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs97/preview">https://onlinecourses.nptel.ac.in/noc23_cs97/preview</a>	noc24_cs53
54	Python for Data Science	Prof. Ragunathan Rengasamy	IITM	4 Weeks	Jan 22, 2024	Feb 16, 2024	Mar 24, 2024	Jan 29, 2024	Feb 16, 2024	Artificial Intelligence Data Science	<a href="https://onlinecourses.nptel.ac.in/noc24_cs54/preview">https://onlinecourses.nptel.ac.in/noc24_cs54/preview</a>	<a href="https://onlinecourses.nptel.ac.in/noc23_cs99/preview">https://onlinecourses.nptel.ac.in/noc23_cs99/preview</a>	noc24_cs54