

Guru Nanak Dev Engineering College, Ludhiana
Department of Computer Science and Engineering

Ref. No.:

Date: 12/01/2023

Notice For Honours Degree

The students of B.Tech. (Computer Science and Engineering) (2019 batch onwards) can opt for honour degree as per the following guidelines:

1. List of subjects for session January-June, 2023 which can be opted through MOOCs:

4th Semester (Batch 2021-25)

S. No.	Course Id	Course Name	Institute	Duration	Click here to join the course
1	noc23-cs06	Introduction to Embedded System Design	IITD	12 Weeks	https://nptel.ac.in/courses/108102169
2	noc23-cs13	Privacy and Security in Online Social Media	IIITH	12 Weeks	https://nptel.ac.in/courses/106106146
3	noc23-cs19	Social Networks	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106169
4	noc23-cs20	The Joy of Computing using Python	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106182
5	noc23-cs30	Getting Started with Competitive Programming	IIT Gandhinagar	12 Weeks	https://nptel.ac.in/courses/106106231
6	noc23-cs37	Circuit Complexity Theory	IITK	12 Weeks	https://nptel.ac.in/courses/106104241
7	noc23-cs44	Ethical Hacking	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105217
8	noc23-cs54	Embedded Systems Design	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105159
9	noc23-cs61	GPU Architectures And Programming	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105220
10	noc23-cs62	Foundations of Cyber Physical Systems	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105241

6th Semester (Batch 2020-24)

Track 1: Software Engineering

S. No.	Course Id	Course Name	Institute	Duration	Click here to join the course
1	noc23-cs01	Randomized Methods in Complexity	IITK	12 Weeks	https://nptel.ac.in/courses/106104228
2	noc23-cs03	Foundations of Cryptography	IIIT Bangalore	12 Weeks	https://nptel.ac.in/courses/106106221
3	noc23-cs04	Quantum Algorithms and Cryptography	IITM	12 Weeks	https://nptel.ac.in/courses/106106241
4	noc23-cs06	Introduction to Embedded System Design	IITD	12 Weeks	https://nptel.ac.in/courses/108102169
5	noc23-cs08	Data Analytics with Python	IITR	12 Weeks	https://nptel.ac.in/courses/106107220

6	noc23-cs12	Model Checking	CMI	12 Weeks	https://nptel.ac.in/courses/106106136
7	noc23-cs13	Privacy and Security in Online Social Media	IITH	12 Weeks	https://nptel.ac.in/courses/106106146
8	noc23-cs19	Social Networks	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106169
9	noc23-cs20	The Joy of Computing using Python	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106182
10	noc23-cs23	Reinforcement Learning	IITM	12 Weeks	https://nptel.ac.in/courses/106106143
11	noc23-cs24	Deep Learning - IIT Ropar	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106184
12	noc23-cs30	Getting Started with Competitive Programming	IIT Gandhinagar	12 Weeks	https://nptel.ac.in/courses/106106231
13	noc23-cs34	Secure Computation: Part I	IIT Bangalore	12 Weeks	https://nptel.ac.in/courses/106108229
14	noc23-cs35	Advanced Computer Networks	IIT Indore IIT Gandhi nagar	12 Weeks	https://nptel.ac.in/courses/106106243
15	noc23-cs36	Affective Computing	IIITD	12 Weeks	https://nptel.ac.in/courses/106106244
16	noc23-cs37	Circuit Complexity Theory	IITK	12 Weeks	https://nptel.ac.in/courses/106104241
17	noc23-cs44	Ethical Hacking	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105217
18	noc23-cs45	Natural Language Processing	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105158
19	noc23-cs47	Blockchain and its Applications	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105235
20	noc23-cs49	Programming In Java	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105191
21	noc23-cs51	Introduction To Internet Of Things	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105166
22	noc23-cs54	Embedded Systems Design	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105159
23	noc23-cs56	Deep Learning	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105215
24	noc23-cs61	GPU Architectures And Programming	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105220
25	noc23-cs62	Foundations of Cyber Physical Systems	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105241

6th Semester (Batch 2020-24)

Track 2: Network Technologies

S. No.	Course Id	Course Name	Institute	Duration	Click here to join the course
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1	noc23-cs01	Randomized Methods in Complexity	IITK	12 Weeks	https://nptel.ac.in/courses/106104228
2	noc23-cs06	Introduction to Embedded System Design	IITD	12 Weeks	https://nptel.ac.in/courses/108102169
3	noc23-cs08	Data Analytics with Python	IITR	12 Weeks	https://nptel.ac.in/courses/106107220
4	noc23-cs12	Model Checking	CMI	12 Weeks	https://nptel.ac.in/courses/106106136
5	noc23-cs13	Privacy and Security in Online Social Media	IITH	12 Weeks	https://nptel.ac.in/courses/106106146
6	noc23-cs19	Social Networks	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106169
7	noc23-cs20	The Joy of Computing using Python	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106182
8	noc23-cs23	Reinforcement Learning	IITM	12 Weeks	https://nptel.ac.in/courses/106106143
9	noc23-cs24	Deep Learning - IIT Ropar	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106184
10	noc23-cs30	Getting Started with Competitive Programming	IIT Gandhinagar	12 Weeks	https://nptel.ac.in/courses/106106231
11	noc23-cs34	Secure Computation: Part I	IIT Bangalore	12 Weeks	https://nptel.ac.in/courses/106108229
12	noc23-cs36	Affective Computing	IITD	12 Weeks	https://nptel.ac.in/courses/106106244
13	noc23-cs37	Circuit Complexity Theory	IITK	12 Weeks	https://nptel.ac.in/courses/106104241
14	noc23-cs44	Ethical Hacking	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105217
15	noc23-cs45	Natural Language Processing	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105158
16	noc23-cs49	Programming In Java	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105191
17	noc23-cs54	Embedded Systems Design	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105159
18	noc23-cs56	Deep Learning	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105215
19	noc23-cs61	GPU Architectures And Programming	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105220
20	noc23-cs62	Foundations of Cyber Physical Systems	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105241

6th Semester (Batch 2020-24)

Track 3: Data Management

S. No.	Course Id	Course Name	Institute	Duration	Click here to join the course
1	noc23-cs01	Randomized Methods in Complexity	IITK	12 Weeks	https://nptel.ac.in/courses/106104228

2	noc23-cs03	Foundations of Cryptography	IIT Bangalore	12 Weeks	https://nptel.ac.in/courses/106106221
3	noc23-cs04	Quantum Algorithms and Cryptography	IITM	12 Weeks	https://nptel.ac.in/courses/106106241
4	noc23-cs06	Introduction to Embedded System Design	IITD	12 Weeks	https://nptel.ac.in/courses/108102169
5	noc23-cs12	Model Checking	CMI	12 Weeks	https://nptel.ac.in/courses/106106136
6	noc23-cs13	Privacy and Security in Online Social Media	IIITH	12 Weeks	https://nptel.ac.in/courses/106106146
7	noc23-cs19	Social Networks	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106169
8	noc23-cs20	The Joy of Computing using Python	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106182
9	noc23-cs23	Reinforcement Learning	IITM	12 Weeks	https://nptel.ac.in/courses/106106143
10	noc23-cs30	Getting Started with Competitive Programming	IIT Gandhinagar	12 Weeks	https://nptel.ac.in/courses/106106231
11	noc23-cs34	Secure Computation: Part I	IIT Bangalore	12 Weeks	https://nptel.ac.in/courses/106108229
12	noc23-cs35	Advanced Computer Networks	IIT Indore IIT Gandhi nagar	12 Weeks	https://nptel.ac.in/courses/106106243
13	noc23-cs36	Affective Computing	IIITD	12 Weeks	https://nptel.ac.in/courses/106106244
14	noc23-cs37	Circuit Complexity Theory	IITK	12 Weeks	https://nptel.ac.in/courses/106104241
15	noc23-cs44	Ethical Hacking	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105217
16	noc23-cs45	Natural Language Processing	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105158
17	noc23-cs47	Blockchain and its Applications	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105235
18	noc23-cs49	Programming In Java	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105191
19	noc23-cs51	Introduction To Internet Of Things	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105166
20	noc23-cs54	Embedded Systems Design	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105159
21	noc23-cs56	Deep Learning	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105215
22	noc23-cs61	GPU Architectures And Programming	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105220
23	noc23-cs62	Foundations of Cyber Physical Systems	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105241

6th Semester (Batch 2020-24)

Track 4: Machine Intelligence

S. No.	Course Id	Course Name	Institute	Duration	Click here to join the course
1	noc23-cs01	Randomized Methods in Complexity	IITK	12 Weeks	https://nptel.ac.in/courses/106104228
2	noc23-cs03	Foundations of Cryptography	IIIT Bangalore	12 Weeks	https://nptel.ac.in/courses/106106221
3	noc23-cs04	Quantum Algorithms and Cryptography	IITM	12 Weeks	https://nptel.ac.in/courses/106106241
4	noc23-cs06	Introduction to Embedded System Design	IITD	12 Weeks	https://nptel.ac.in/courses/108102169
5	noc23-cs08	Data Analytics with Python	IITR	12 Weeks	https://nptel.ac.in/courses/106107220
6	noc23-cs12	Model Checking	CMI	12 Weeks	https://nptel.ac.in/courses/106106136
7	noc23-cs13	Privacy and Security in Online Social Media	IIITH	12 Weeks	https://nptel.ac.in/courses/106106146
8	noc23-cs19	Social Networks	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106169
9	noc23-cs20	The Joy of Computing using Python	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106182
10	noc23-cs23	Reinforcement Learning	IITM	12 Weeks	https://nptel.ac.in/courses/106106143
11	noc23-cs30	Getting Started with Competitive Programming	IIT Gandhinagar	12 Weeks	https://nptel.ac.in/courses/106106231
12	noc23-cs34	Secure Computation: Part I	IIIT Bangalore	12 Weeks	https://nptel.ac.in/courses/106108229
13	noc23-cs35	Advanced Computer Networks	IIT Indore IIT Gandhi nagar	12 Weeks	https://nptel.ac.in/courses/106106243
14	noc23-cs37	Circuit Complexity Theory	IITK	12 Weeks	https://nptel.ac.in/courses/106104241
15	noc23-cs42	Cloud Computing	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105167
16	noc23-cs44	Ethical Hacking	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105217
17	noc23-cs47	Blockchain and its Applications	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105235
18	noc23-cs49	Programming In Java	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105191
19	noc23-cs51	Introduction To Internet Of Things	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105166
20	noc23-cs54	Embedded Systems Design	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105159
21	noc23-cs61	GPU Architectures And Programming	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105220

22	noc23-cs62	Foundations of Cyber Physical Systems	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105241
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6th Semester (Batch 2020-24)

Track 5: Algorithm Design and Programming

S. No.	Course Id	Course Name	Institute	Duration	Click here to join the course
1	noc23-cs01	Randomized Methods in Complexity	IITK	12 Weeks	https://nptel.ac.in/courses/106104228
2	noc23-cs03	Foundations of Cryptography	IIT Bangalore	12 Weeks	https://nptel.ac.in/courses/106106221
3	noc23-cs04	Quantum Algorithms and Cryptography	IITM	12 Weeks	https://nptel.ac.in/courses/106106241
4	noc23-cs06	Introduction to Embedded System Design	IITD	12 Weeks	https://nptel.ac.in/courses/108102169
5	noc23-cs12	Model Checking	CMI	12 Weeks	https://nptel.ac.in/courses/106106136
6	noc23-cs13	Privacy and Security in Online Social Media	IIITH	12 Weeks	https://nptel.ac.in/courses/106106146
7	noc23-cs19	Social Networks	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106169
8	noc23-cs20	The Joy of Computing using Python	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106182
9	noc23-cs23	Reinforcement Learning	IITM	12 Weeks	https://nptel.ac.in/courses/106106143
10	noc23-cs24	Deep Learning - IIT Ropar	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106184
	noc23-cs30	Getting Started with Competitive Programming	IIT Gandhinagar	12 Weeks	https://nptel.ac.in/courses/106106231
11	noc23-cs34	Secure Computation: Part I	IIIT Bangalore	12 Weeks	https://nptel.ac.in/courses/106108229
12	noc23-cs35	Advanced Computer Networks	IIT Indore IIT Gandhi nagar	12 Weeks	https://nptel.ac.in/courses/106106243
13	noc23-cs36	Affective Computing	IIITD	12 Weeks	https://nptel.ac.in/courses/106106244
14	noc23-cs37	Circuit Complexity Theory	IITK	12 Weeks	https://nptel.ac.in/courses/106104241
15	noc23-cs42	Cloud Computing	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105167
16	noc23-cs44	Ethical Hacking	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105217
17	noc23-cs45	Natural Language Processing I	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105158
18	noc23-cs47	Blockchain and its Applications	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105235
19					https://nptel.ac.in/courses/1061

	noc23-cs51	Introduction To Internet Of Things	IITKGP	12 Weeks	05166
20	noc23-cs54	Embedded Systems Design	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105159
21	noc23-cs56	Deep Learning	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105215
22	noc23-cs61	GPU Architectures And Programming	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105220
23	noc23-cs62	Foundations of Cyber Physical Systems	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105241

8th Semester (Batch 2019-23)

S. No.	Course Id	Course Name	Institute	Duration	Click here to join the course
1	noc23-cs01	Randomized Methods in Complexity	IITK	12 Weeks	https://nptel.ac.in/courses/106104228
2	noc23-cs04	Quantum Algorithms and Cryptography	IITM	12 Weeks	https://nptel.ac.in/courses/106106241
3	noc23-cs06	Introduction to Embedded System Design	IITD	12 Weeks	https://nptel.ac.in/courses/108102169
4	noc23-cs12	Model Checking	CMI	12 Weeks	https://nptel.ac.in/courses/106106136
5	noc23-cs13	Privacy and Security in Online Social Media	IIITH	12 Weeks	https://nptel.ac.in/courses/106106146
6	noc23-cs19	Social Networks	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106169
7	noc23-cs20	The Joy of Computing using Python	IIT Ropar	12 Weeks	https://nptel.ac.in/courses/106106182
8	noc23-cs23	Reinforcement Learning	IITM	12 Weeks	https://nptel.ac.in/courses/106106143
9	noc23-cs30	Getting Started with Competitive Programming	IIT Gandhinagar	12 Weeks	https://nptel.ac.in/courses/106106231
10	noc23-cs34	Secure Computation: Part I	IIIT Bangalore	12 Weeks	https://nptel.ac.in/courses/106108229
11	noc23-cs36	Affective Computing	IIITD	12 Weeks	https://nptel.ac.in/courses/106106244
12	noc23-cs37	Circuit Complexity Theory	IITK	12 Weeks	https://nptel.ac.in/courses/106104241
13	noc23-cs44	Ethical Hacking	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105217
14	noc23-cs54	Embedded Systems Design	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105159
15	noc23-cs61	GPU Architectures And Programming	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105220
16	noc23-cs62	Foundations of Cyber Physical Systems	IITKGP	12 Weeks	https://nptel.ac.in/courses/106105241

2. The subjects should be chosen other than in the study scheme 2018 of B.Tech. (CSE).
3. 18 to 20 credits can be earned through MOOCs to secure an honour degree.
4. The student cannot choose the course having similar contents, already studied by him/her through MOOCs.
5. Fill in the details at <https://forms.gle/4xLkB5AA4M1iNJes8> immediately after registering for MOOC's course and the duly filled proforma (available on the departmental weblink) must be submitted in department office by January 30, 2023.
6. Choice of one course other than the parent branch is allowed from the following list.

S. No.	Course Id	Course Name	Institute	Duration	Click here to join the course
1	noc23-ge04	Non-conventional energy Resources	IITM	12 Weeks	https://nptel.ac.in/courses/121106014
2	noc23-ge12	Rural Water Resources Management	IITB	12 Weeks	https://nptel.ac.in/courses/105101215
3	noc23-ge13	Groundwater hydrology and management	IITB	12 Weeks	https://nptel.ac.in/courses/105101214
4	noc23-ge16	Entrepreneurship Essentials	IITKGP	12 Weeks	https://nptel.ac.in/courses/127105007
5	noc23-ge17	Introduction To Environmental Engineering And Science - Fundamental And Sustainability Concepts	IITKGP	12 Weeks	https://nptel.ac.in/courses/127105018
6	noc23-ge23	Fundamental of Fluid Mechanics for Chemical and Biomedical Engineers	IITG	12 Weeks	https://nptel.ac.in/courses/127103225
7	noc23-ge25	Engineering Statistics	IITB	12 Weeks	https://nptel.ac.in/courses/127101233

HOD(CSE)

Department of Computer Science and Engineering

MOOCSS Course Performa for Honours Degree

Session: January-June 2023

University Roll No. : _____

Name : _____

Semester : _____

Track : _____

Contact Number : _____

Course Id : _____

Course Name : _____

Signature of Student