

**CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A)  
Department of Computer Science and Engineering**

**NPTEL EQUIVALENT COURSES FOR MINOR DEGREE 2021-2022**

**Date: 17-05-2021**

**Additional Minor Engineering Degree In**

- I. Computer Engineering
- II. Computer Vision
- III. Cloud Computing
- IV. Cyber Security
- V. Internet of Things

The Tentative list of courses for Additional Minor Degree approved by Computer Science and Engineering Department BoS members are as follows:  
I and II Semester-maximum 4 credits, III and IV Semester- maximum 4 to 6 credits including internship, V and VI Semester- maximum 6 credits, VII and VIII Semester- maximum 6 credits

Note: Student has to choose the courses at least from any two groups and from each group at most 2 courses only.

**\*-subject to approval, from the department**

**The lists of subjects approved for Computer Science Engineering Department are as follows:**

Computer Science and Engineering			
Group-I-Programming Course/Credits-2/4	Group-II- Foundation Course/Credits-2/4	Group-III-Technology Course/Credits-2/6	Group-IV-Advanced concepts Course/Credits-2/6
Programming in C++	Data BaseManagement System	Mobil Application Development	GeneticAlgorithms
Programming in Java	Computer architecture and organization	GUI Programming	ArtificialIntelligence
Python	Introduction to OperatingSystems	WebProgramming	ComputerVision
Oops-C++/JAVA/Python	Data Structures andAlgorithms.	Machine Learning using Python /R	High Performance Computing
Scripting- Shell/Java Script/Perl/PHP/HTML/Python	Computer networks	Data Mining	CloudComputing
Functional programming languages- Kotlin/Rust/Go/Haskell/Scala.	IT support for Professional.	Soft Computing using python / MATLAB	ParallelAlgorithms
OOAD and Software Testing Methodology	Discrete Mathematics	Latex forEngineers	Distributed Operating Systems
<b>*Certification from Online Coding Platforms (Codechef, Leetcode,etc.)</b>		Scilab forEngineers	SoftwareDefined Networks
		Data Science using Python / R	Open Source Technologies for Engineers
		Open GIS	<b>Capstone project</b>
		GHDL /NG5	
		KiCAD	
		Blendor	
		Full stack development	

		Foss	
		Agile Development methodologies.	
<b>Computer Vision</b>			
<b>Group-I-Programming Course/Credits-2/4</b>	<b>Group-II- Foundation Course/Credits-2/4</b>	<b>Group-III-Technology Course/Credits-2/6</b>	<b>Group-IV-Advanced concepts Course/Credits-2/6</b>
Programming in C++	Data BaseManagement System	DigitallImage Processing	Deep Learning for ComputerVision
Programming in Java	Computer architecture and organization	Basics ofPhotography	RemoteSensing and Digital Image Processing of Satellite Data
Python	Introduction to OperatingSystems	Virtual Reality	DeepLearning for Visual Computing
Oops-C++/JAVA/Python	Data Structures andAlgorithms.	PatternRecognition and Application	MedicalImage Analysis
Scripting- Shell/Java Script/Perl/PHP/HTML/Python	ComputerGraphics	Digital Video / SignalProcessing	ComputerVision
Functional programming languages- Kotlin/Rust/Go/Haskell/Scala	Computer networks	Augmented reality	ComputerVision object detection with OpenCV and Python
OOAD and Software Testing Methodology	IT support for Professional	Full stack Development	<b>Capstone project</b>
<b>*Certification from Online Coding Platforms (Codechef, Leetcode,etc.)</b>	Discrete Mathematics	Foss	
		Agile Development methodologies	
<b>Cloud Computing</b>			
<b>Group-I-Programming Course/Credits-2/4</b>	<b>Group-II- Foundation Course/Credits-2/4</b>	<b>Group-III-Technology Course/Credits-2/6</b>	<b>Group-IV-Advanced concepts Course/Credits-2/6</b>
Programming in C++	Data BaseManagement System	Devops	Distributed OperatingSystems

Programming in Java	Computer architecture and organization	Containers / Dockers	ContentDelivery Network
Python	Introduction to OperatingSystems	ServiceOriented Architecture	Fog /Edge Computing
Oops-C++/JAVA/Python	Data Structures andAlgorithms	Databases on cloud	Grid and clustered computing
fScripting- Shell/Java Script/Perl/PHP/HTML/Python	Cloud Technologies	Full stack Development	Distributed Micro Services
Functional programming languages- Kotlin/Rust/Go/Haskell/Scala	Computer networks	Foss	IT Infrastructure for Cloud
OOAD and Software Testing Methodology	IT support for Professional	Agile Development methodologies.	Software Defined Networks
<b>*Certification from Online Coding Platforms (Codechef, Leetcode,etc.)</b>	Discrete mathematics	Micro services	Cloudcomputing
		Cloud infrastructure/Architecture	<b>Capstone project</b>
<b>Cyber Security</b>			
<b>Group-I-Programming Course/Credits-2/4</b>	<b>Group-II- Foundation Course/Credits-2/4</b>	<b>Group-III-Technology Course/Credits-2/6</b>	<b>Group-IV-Advanced concepts Course/Credits-2/6</b>
Programming in C++	Data BaseManagement System	Introduction To Cyber Security	Industry 4.0 and securitychallenges
Programming in Java	Computer architecture and organization	LinuxOperating System	IT infrastructure
Python	Introduction to OperatingSystems	Scriptingfor Hacker	Information Security - 5 - Secure Systems Engineering
Oops-C++/JAVA/Python	Data Structures andAlgorithms	Riskassessment and penetrating testing	<b>Capstone Project</b>

Scripting-Shell/Java Script/Perl/PHP/HTML/Python	Computer networks	Cyber security tools in kali linux	
Functional programming languages- Kotlin/Rust/Go/Haskell/Scala	IT support for Professional	Linux fundamentals	
OOAD and Software Testing Methodology	Discrete Mathematics	Hands onpenetrating testing	
<b>*Certification from Online Coding Platforms (Codechef, Leetcode,etc.)</b>	Foundation course on cyber security	Block chain and Smart contract	
		Full stack Development	
		Foss	
		Agile Development methodologies.	
		Cyber laws.	
		Vulnerability	
		Network Security.	
<b>Internet of Things</b>			
<b>Group-I-Programming Course/Credits-2/4</b>	<b>Group-II- Foundation Course/Credits-2/4</b>	<b>Group-III-Technology Course/Credits-2/6</b>	<b>Group-IV-Advanced concepts Course/Credits-2/6</b>
Programming in C++	Cprogramming andassembly language	Embedded HardwareSystem Design	Securityin IoT
Programming in Java	DataBase ManagementSystem	Embedded SoftwareDesign	IoT andApplications
Python	Computer architectureand organization	Wirelessand Sensor Networks	MachineLearning

Oops-C++/JAVA/Python	Introduction to Operating Systems	ArtificialIntelligence	Data Science for Engineers
Scripting-Shell/Java Script/Perl/PHP/HTML/Python	Computer networks	Development of RealTime systems	Researchdirections in IoT
Functional programming languages- Kotlin/Rust/Go/Haskell/Scala	IT support for Professional	Dynamic programmingin IoT	GreenBuilding Management /IoT for Power Grids
OOAD and Software Testing Methodology	Internet of Things	5GTechnologies	Introduction to Healthcare Informatics
<b>*Certification from Online Coding Platforms (Codechef, Leetcode,etc.)</b>	Sensors and IOT devices (Applicable for Civil and Mechanical)	RemoteSensing and GIS	Data Mining and PredictiveModeling
	Discrete Mathematics	Introduction to Embedded SystemDesign	Smart Cities – Management ofSmart Urban Infrastructures
		Fundamentals of Biosensors andElectronic Biochips	Foundations to Cognitive Robotics
		Introduction and programming with IoT Boards	IoT wireless and cloud computing emergingtechnologies
		Full stack Development	Introduction to Industry 4.0 and IndustrialInternet of Things
		Foss	<b>Capstone project</b>
		Agile Development methodologies	
		Design for Internet of things	

**NPTEL/ COURSERA EQUIVALENT COURSES**

Sno	Course Code and Course Name	Course Name	Institute	Credits	Duration	Start date	Exam date	Nptel/Coursera links
<b>Computer Engineering</b>								
<b>Group-I(CE)</b>								
1.	20CSMCE01: Programmin gin C++	Programmin gin C++	IITKGP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs55/preview">https://onlinecourses.nptel.ac.in/noc21_cs55/preview</a>
2.	20CSMCE02: Programmin gin Java	Programmin gin Java	IITKGP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs56/preview">https://onlinecourses.nptel.ac.in/noc21_cs56/preview</a>
3.	20CSMCE03: Python	Joy of computi ng using Python	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs75/preview">https://onlinecourses.nptel.ac.in/noc21_cs75/preview</a>
4.	20CSMCE04: Scripting- Shell/Java Script/Perl/PHP/HTML/Python	Programmi ngFoundati ons with JavaScript, HTML and CSS	DukeUniv ersity	1	4 Weeks	Conside red from registere d Date		<a href="https://www.coursera.org/learn/du ke-programming-web">https://www.coursera.org/learn/du ke-programming-web</a>
5	20CSMCE05: Functional programming languages- Kotlin/Rust/Go/Haskell/Scala.	Functional Programmi ng Principles in Scala	EPFL	1.5	6 Weeks	Conside red from registere d Date		<a href="https://www.coursera.org/learn/pr ogfun1?specialization=scala">https://www.coursera.org/learn/pr ogfun1?specialization=scala</a>
6	20CSMCE06: OOAD and Software Testing Methodolog y	Object Oriented Analysis andDesign	IITKGP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs57/preview">https://onlinecourses.nptel.ac.in/noc21_cs57/preview</a>
		Softw are Testin g	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://www.google.com/url?q=https://onlinecourses.nptel.ac.in/noc21_cs73/preview&amp;sa=D&amp;source=editors&amp;ust=1621418484634000&amp;usq=AFQjCNEvikY2KTdzRDmF">https://www.google.com/url?q=https://onlinecourses.nptel.ac.in/noc21_cs73/preview&amp;sa=D&amp;source=editors&amp;ust=1621418484634000&amp;usq=AFQjCNEvikY2KTdzRDmF</a>

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<b>Group-II(CE)</b>									
7	20CSMCE07: Data Base Management System	Data Base Management System	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs58/preview">https://onlinecourses.nptel.ac.in/noc21_cs58/preview</a>	
8	20CSMCE08: Computer architecture and organization	Computer architecture and organization	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs61/preview">https://onlinecourses.nptel.ac.in/noc21_cs61/preview</a>	
9	20CSMCE09: Operating Systems	Introduction to Operating Systems	IITM	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs72/preview">https://onlinecourses.nptel.ac.in/noc21_cs72/preview</a>	
10	20CSMCE10: Data Structures and Algorithms	Programming, Data Structures And Algorithms Using Python	CMI	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs67/preview">https://onlinecourses.nptel.ac.in/noc21_cs67/preview</a>	
11	20CSMCE11: Discrete Mathematics	Discrete Mathematics	IIT Ropar	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs80/preview">https://onlinecourses.nptel.ac.in/noc21_cs80/preview</a>	
<b>Group-III(CE)</b>									
12	20CSMCE12: Mobile Application Development	Java for android	Vand erbilt unive rsity	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/java-for-android?specialization=android-app-development">https://www.coursera.org/learn/java-for-android?specialization=android-app-development</a>	
		Android App Components - Intents, Activities, and Broadcast Receivers	Vand erbilt unive rsity	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/androidapps?specialization=android-app-development">https://www.coursera.org/learn/androidapps?specialization=android-app-development</a>	
		Android App Components - Services, Local IPC, and	Vand erbilt unive rsity	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/androidapps-2?specialization=android-app-development">https://www.coursera.org/learn/androidapps-2?specialization=android-app-development</a>	



		Content Providers						
13	20CSMCE13: Machine Learning using Python /R <b>(Select any one)</b>	Introduction to Machine Learning - IITM	IITM	3	12 Weeks	July 26, 2021	October 24, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs70/preview">https://onlinecourses.nptel.ac.in/noc21_cs70/preview</a>
		Introduction to Machine Learning - IITKGP	IITKGP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs85/preview">https://onlinecourses.nptel.ac.in/noc21_cs85/preview</a>
14	20CSMCE14: Data Science using Python	Python for Data Science	IITM	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs78/preview">https://onlinecourses.nptel.ac.in/noc21_cs78/preview</a>
15	20CSMCE15: Full stack Development	Front-End Web UI Frameworks and Tools: Bootstrap 4	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/bootstrap-4?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/bootstrap-4?specialization=full-stack-mobile-app-development</a>
		Front-End JavaScript Frameworks: Angular	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/angular?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/angular?specialization=full-stack-mobile-app-development</a>
		Server-side Development with NodeJS, Express and MongoDB	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/server-side-nodejs?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/server-side-nodejs?specialization=full-stack-mobile-app-development</a>
16	20CSMCE16 Agile Development methodologies	Agile Software Development	University of Minn	1	4	-	-	<a href="https://www.coursera.org/learn/agile-software-development">https://www.coursera.org/learn/agile-software-development</a>

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<b>Group-IV(CE)</b>								
17	20CSMCE17: Artificial Intelligence	Fundamentals Of Artificial Intelligence	IITG	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_ge20/preview">https://onlinecourses.nptel.ac.in/noc21_ge20/preview</a>
18	20CSMCE18: Computer Vision	Computer Vision	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs101/preview">https://onlinecourses.nptel.ac.in/noc21_cs101/preview</a>
19	20CSMCE19: High Performance Computing	Introduction to High- Performance and Parallel Computing	Color ado bould er unive rity	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/introduction-high-performance-computing">https://www.coursera.org/learn/introduction-high-performance-computing</a>
20	20CSMCE20: Cloud Computing	Cloud computing	IITK GP	2	8 Weeks	August 23, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs62/preview">https://onlinecourses.nptel.ac.in/noc21_cs62/preview</a>
21	20CSMCE21: Software Defined Networks	Software Defined Networks	Chica go unive rity	2	8 Weeks	-	-	<a href="https://www.coursera.org/learn/sdn">https://www.coursera.org/learn/sdn</a>
<b>Computer Vision</b>								
<b>Group-I(CV)</b>								
1	20CSMVC01: Programming in C++	Programming in C++	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs55/preview">https://onlinecourses.nptel.ac.in/noc21_cs55/preview</a>
2	20CSMVC02: Programming in Java	Programming in Java	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs56/preview">https://onlinecourses.nptel.ac.in/noc21_cs56/preview</a>
3	20CSMVC03: Python	Joy of computing using Python	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs75/preview">https://onlinecourses.nptel.ac.in/noc21_cs75/preview</a>
4	20CSMVC04: Scripting- Shell/Java Script/Perl/PH P/HTML/Python	Programming Foundations with JavaScript, HTML and CSS	Duke Univ ersity	1	4 Weeks	Conside red from registre d Date		<a href="https://www.coursera.org/learn/duke-programming-web">https://www.coursera.org/learn/duke-programming-web</a>
5	20CSMVC05:	Functional	EPFL	1.5	6 Weeks	Conside		<a href="https://www.coursera.org/learn/pr">https://www.coursera.org/learn/pr</a>

	Functional programming languages- Kotlin/Rust/Go/Haskell/Scala	Programming Principles in Scala				red from registered Date		<a href="https://ocw.mit.edu/courses/6.034-advanced-programming-in-scala/">ogfun1?specialization=scala</a>
6	20CSMCV06: OOAD and Software Testing Methodology	Object Oriented Analysis and Design	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs57/preview">https://onlinecourses.nptel.ac.in/noc21_cs57/preview</a>
		Software Testing	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://www.google.com/url?q=https://onlinecourses.nptel.ac.in/noc21_cs73/preview&amp;sa=D&amp;source=editors&amp;ust=1621418484634000&amp;usq=AFQjCNEvikY2KTdzRDmF-YJ_lgfKX_040g">https://www.google.com/url?q=https://onlinecourses.nptel.ac.in/noc21_cs73/preview&amp;sa=D&amp;source=editors&amp;ust=1621418484634000&amp;usq=AFQjCNEvikY2KTdzRDmF-YJ_lgfKX_040g</a>
<b>Group-II(CV)</b>								
7	20CSMCV07: Data Base Management System	Data Base Management System	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs58/preview">https://onlinecourses.nptel.ac.in/noc21_cs58/preview</a>
8	20CSMCV08 Computer architecture and organization	Computer architecture and organization	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs61/preview">https://onlinecourses.nptel.ac.in/noc21_cs61/preview</a>
9	20CSMCV09: Operating Systems	Introduction to Operating Systems	IITM	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs72/preview">https://onlinecourses.nptel.ac.in/noc21_cs72/preview</a>
10	20CSMCV10: Data Structures And Algorithms	Programming, Data Structures And Algorithms Using Python	CMI	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs67/preview">https://onlinecourses.nptel.ac.in/noc21_cs67/preview</a>
11	20CSMCV11: Discrete Mathematics	Discrete Mathematics	IIT Ropar	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs80/preview">https://onlinecourses.nptel.ac.in/noc21_cs80/preview</a>
12	20CSMCV12: Computer Graphics	Computer Graphics	IITG	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs97/preview">https://onlinecourses.nptel.ac.in/noc21_cs97/preview</a>

	Group-III(CV)							
13	20CSMCV13: Digital Image Processing	Digital Image Processing	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_ee78/preview">https://onlinecourses.nptel.ac.in/noc21_ee78/preview</a>
14	20CSMCV14: Virtual Reality	Introduction to Virtual Reality	University of London	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/introduction-virtual-reality?specialization=virtual-reality">https://www.coursera.org/learn/introduction-virtual-reality?specialization=virtual-reality</a>
15	20CSMCV15: Pattern Recognition and Application	Pattern Recognition and Application	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_ee79/preview">https://onlinecourses.nptel.ac.in/noc21_ee79/preview</a>
16	20CSMCV16: Signal Processing	Image Signal Processing	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_ee100/preview">https://onlinecourses.nptel.ac.in/noc21_ee100/preview</a>
17	20CSMCV17: Full stack Development	Front-End Web UI Frameworks and Tools: Bootstrap 4	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/bootstrap-4?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/bootstrap-4?specialization=full-stack-mobile-app-development</a>
		Front-End JavaScript Frameworks: Angular	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/angular?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/angular?specialization=full-stack-mobile-app-development</a>
		Server-side Development with NodeJS, Express and MongoDB	The Hong Kong university of sci and	1	4	-	-	<a href="https://www.coursera.org/learn/server-side-nodejs?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/server-side-nodejs?specialization=full-stack-mobile-app-development</a>

			tech					
18	20CSMCV18: Agile Development methodologies	Agile Software Development	University of Minnesota	1	4	-	-	<a href="https://www.coursera.org/learn/agile-software-development">https://www.coursera.org/learn/agile-software-development</a>
<b>Group-IV(CV)</b>								
19	20CSMCV19: Deep Learning for Computer Vision	Deep Learning for Computer Vision	IIT Hyderabad	3	12 Weeks	July 26, 2021	October 24, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs93/preview">https://onlinecourses.nptel.ac.in/noc21_cs93/preview</a>
20	20CSMCV20: Remote Sensing and Digital Image Processing of Satellite Data	Remote Sensing and GIS	IIG	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_ce61/preview">https://onlinecourses.nptel.ac.in/noc21_ce61/preview</a>
21	20CSMCV21: Computer Vision	Computer Vision	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs101/preview">https://onlinecourses.nptel.ac.in/noc21_cs101/preview</a>
<b>Cloud Computing</b>								
<b>Group-I(CC)</b>								
1	20CSMCC01: Programming in C++	Programming in C++	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs55/preview">https://onlinecourses.nptel.ac.in/noc21_cs55/preview</a>
2	20CSMCC01: Programming in Java	Programming in Java	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs56/preview">https://onlinecourses.nptel.ac.in/noc21_cs56/preview</a>
3	20CSMCC03: Python	Joy of computing using Python	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs75/preview">https://onlinecourses.nptel.ac.in/noc21_cs75/preview</a>
4	20CSMCC04: Scripting-Shell/Java Script/Perl/PHP/HTML/Python	Programming Foundations with JavaScript, HTML and CSS	Duke University	1	4 Weeks	Considered from registered Date		<a href="https://www.coursera.org/learn/duke-programming-web">https://www.coursera.org/learn/duke-programming-web</a>
5	20CSMCC05: Functional	Functional Programming	EPFL	1.5	6 Weeks	Considered from		<a href="https://www.coursera.org/learn/progfun1?specialization=scala">https://www.coursera.org/learn/progfun1?specialization=scala</a>

	programming languages- Kotlin/Rust/Go/Haskell/Scala	Principles in Scala				registered Date		
6	20CSMCC06: OOAD and Software Testing Methodology	Object Oriented Analysis and Design	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs57/preview">https://onlinecourses.nptel.ac.in/noc21_cs57/preview</a>
		Software Testing	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://www.google.com/url?q=https://onlinecourses.nptel.ac.in/noc21_cs73/preview&amp;sa=D&amp;source=editors&amp;ust=1621418484634000&amp;usq=AFQjCNEvikY2KTdzRDmF-YJ_lqfKX_040g">https://www.google.com/url?q=https://onlinecourses.nptel.ac.in/noc21_cs73/preview&amp;sa=D&amp;source=editors&amp;ust=1621418484634000&amp;usq=AFQjCNEvikY2KTdzRDmF-YJ_lqfKX_040g</a>
<b>Group-II(CC)</b>								
7	20CSMCC07: Data Base Management System	Data Base Management System	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs58/preview">https://onlinecourses.nptel.ac.in/noc21_cs58/preview</a>
8	20CSMCC08: Computer architecture and organization	Computer architecture and organization	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs61/preview">https://onlinecourses.nptel.ac.in/noc21_cs61/preview</a>
9	20CSMCC09: Operating Systems	Introduction to Operating Systems	IITM	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs72/preview">https://onlinecourses.nptel.ac.in/noc21_cs72/preview</a>
10	20CSMCC10: Data Structures and Algorithms	Programming, Data Structures And Algorithms Using Python	CMI	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs67/preview">https://onlinecourses.nptel.ac.in/noc21_cs67/preview</a>
11	20CSMCC11: Discrete Mathematics	Discrete Mathematics	IIT Ropar	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs80/preview">https://onlinecourses.nptel.ac.in/noc21_cs80/preview</a>
12	20CSMCC12: Cloud Computing	Cloud computing	IITK GP	2	8 Weeks	August 23, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs62/preview">https://onlinecourses.nptel.ac.in/noc21_cs62/preview</a>
<b>Group-III(CC)</b>								

13	20CSMCC13: Cloud infrastructure/ Architecture	Essential Google Cloud Infrastructure: Core Services	Google Cloud	0.5	2 Weeks			<a href="https://www.coursera.org/learn/google-infrastructure-core-services">https://www.coursera.org/learn/google-infrastructure-core-services</a>
14	20CSMCC14: Containers / Dockers	Introduction to Containers w/ Docker, Kubernetes & OpenShift	IBM	1.25	5 Weeks			<a href="https://www.coursera.org/learn/ibm-containers-docker-kubernetes-openshift">https://www.coursera.org/learn/ibm-containers-docker-kubernetes-openshift</a>
15	20CSMCC15: Full stack Development	Front-End Web UI Frameworks and Tools: Bootstrap 4	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/bootstrap-4?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/bootstrap-4?specialization=full-stack-mobile-app-development</a>
		Front-End JavaScript Frameworks: Angular	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/angular?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/angular?specialization=full-stack-mobile-app-development</a>
		Server-side Development with NodeJS, Express and MongoDB	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/server-side-nodejs?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/server-side-nodejs?specialization=full-stack-mobile-app-development</a>
16	20CSMCC16: Agile Development methodologies	Agile Software Development	University of Minn	1	4	-	-	<a href="https://www.coursera.org/learn/agile-software-development">https://www.coursera.org/learn/agile-software-development</a>

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17	20CSMCC17: Service-Oriented Architecture	Service-Oriented Architecture	University of Alberta	1	4	-	-	<a href="https://www.coursera.org/learn/service-oriented-architecture">https://www.coursera.org/learn/service-oriented-architecture</a>
<b>Group-IV(CC)</b>								
18	20CSMCC18: Software Defined Networks	Software Defined Networks	Chicago university	2	8 Weeks	-	-	<a href="https://www.coursera.org/learn/sdn">https://www.coursera.org/learn/sdn</a>
<b>Cyber Security</b>								
<b>Group-I(CS)</b>								
1	20CSMCS01: Programming in C++	Programming in C++	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs55/preview">https://onlinecourses.nptel.ac.in/noc21_cs55/preview</a>
2	20CSMCS02: Programming in Java	Programming in Java	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs56/preview">https://onlinecourses.nptel.ac.in/noc21_cs56/preview</a>
3	20CSMCS03: Python	Joy of computing using Python	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs75/preview">https://onlinecourses.nptel.ac.in/noc21_cs75/preview</a>
4	20CSMCS04: Scripting-Shell/Java Script/Perl/PHP/HTML/Python	Programming Foundations with JavaScript, HTML and CSS	Duke University	1	4 Weeks	Considered from registered Date		<a href="https://www.coursera.org/learn/duke-programming-web">https://www.coursera.org/learn/duke-programming-web</a>
5	20CSMCS05: Functional programming languages-Kotlin/Rust/Go/Haskell/Scala	Functional Programming Principles in Scala	EPFL	1.5	6 Weeks	Considered from registered Date		<a href="https://www.coursera.org/learn/progfun1?specialization=scala">https://www.coursera.org/learn/progfun1?specialization=scala</a>
6	20CSMCS06: OOAD and Software Testing	Object Oriented Analysis and Design	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs57/preview">https://onlinecourses.nptel.ac.in/noc21_cs57/preview</a>



	Methodology	Software Testing	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://www.google.com/url?q=https://onlinecourses.nptel.ac.in/noc21_cs73/preview&amp;sa=D&amp;source=editors&amp;ust=1621418484634000&amp;usg=AFQjCNEvikY2KTdzRDmF-YJ_lgfKX_040g">https://www.google.com/url?q=https://onlinecourses.nptel.ac.in/noc21_cs73/preview&amp;sa=D&amp;source=editors&amp;ust=1621418484634000&amp;usg=AFQjCNEvikY2KTdzRDmF-YJ_lgfKX_040g</a>
<b>Group-II(CS)</b>								
7	20CSMCS07: Data Base Management System	Data Base Management System	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs58/preview">https://onlinecourses.nptel.ac.in/noc21_cs58/preview</a>
8	20CSMCS08: Computer architecture and organization	Computer architecture and organization	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs61/preview">https://onlinecourses.nptel.ac.in/noc21_cs61/preview</a>
9	20CSMCS09: Operating Systems	Introduction to Operating Systems	IITM	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs72/preview">https://onlinecourses.nptel.ac.in/noc21_cs72/preview</a>
10	20CSMCS10: Data Structures and Algorithms	Programming, Data Structures And Algorithms Using Python	CMI	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs67/preview">https://onlinecourses.nptel.ac.in/noc21_cs67/preview</a>
11	20CSMCS11: Discrete Mathematics	Discrete Mathematics	IIT Ropar	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs80/preview">https://onlinecourses.nptel.ac.in/noc21_cs80/preview</a>
12	20CSMCS12: Foundation course on cyber security	Introduction to Cyber Attacks	NYU	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/intro-cyber-attacks?specialization=intro-cyber-security">https://www.coursera.org/learn/intro-cyber-attacks?specialization=intro-cyber-security</a>
		Cyber Attack Countermeasures	NYU	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/cyber-attack-countermeasures?specialization=intro-cyber-security">https://www.coursera.org/learn/cyber-attack-countermeasures?specialization=intro-cyber-security</a>
		Real-Time Cyber Threat Detection and Mitigation	NYU	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/real-time-cyber-threat-detection?specialization=intro-cyber-security">https://www.coursera.org/learn/real-time-cyber-threat-detection?specialization=intro-cyber-security</a>
<b>Group-III(CS)</b>								

13	20CSMCS13: Cyber security tools in kali linux	Introduction to Cyber security Tools & Cyber Attacks	IBM	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/introduction-cybersecurity-cyber-attacks?specialization=ibm-cybersecurity-analyst">https://www.coursera.org/learn/introduction-cybersecurity-cyber-attacks?specialization=ibm-cybersecurity-analyst</a>
14	20CSMCS14: Block chain and Smart contract	Block chain Basics	NYU	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/blockchain-basics">https://www.coursera.org/learn/blockchain-basics</a>
		Smart Contracts	NYU	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/smart-contracts">https://www.coursera.org/learn/smart-contracts</a>
15	20CSMCS15: Vulnerabilities	Network Security & Database Vulnerabilities	IBM	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/network-security-database-vulnerabilities">https://www.coursera.org/learn/network-security-database-vulnerabilities</a>
16	20CSMCS16: Full stack Development	Front-End Web UI Frameworks and Tools: Bootstrap 4	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/bootstrap-4?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/bootstrap-4?specialization=full-stack-mobile-app-development</a>
		Front-End JavaScript Frameworks: Angular	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/angular?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/angular?specialization=full-stack-mobile-app-development</a>
		Server-side Development with NodeJS, Express and MongoDB	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/server-side-nodejs?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/server-side-nodejs?specialization=full-stack-mobile-app-development</a>
17	20CSMCS17: Agile Development methodologies	Agile Software Development	University of Minnesota	1	4	-	-	<a href="https://www.coursera.org/learn/agile-software-development">https://www.coursera.org/learn/agile-software-development</a>

18	20CSMCS18: Linux Operating Systems	Cyber security Roles, Processes & Operating System Security	IBM	1	4	-	-	<a href="https://www.coursera.org/learn/cybersecurity-roles-processes-operating-system-security">https://www.coursera.org/learn/cybersecurity-roles-processes-operating-system-security</a>
		Cyber security Compliance Framework & System Administrati on	IBM	1	4	-	-	<a href="https://www.coursera.org/learn/cybersecurity-compliance-framework-system-administration">https://www.coursera.org/learn/cybersecurity-compliance-framework-system-administration</a>
19	20CSMCS19 :Scripting for Hacker	Hacking and Patching	Univ ersity of color ado	1	4	-	-	<a href="https://www.coursera.org/learn/hacking-patching">https://www.coursera.org/learn/hacking-patching</a>
20	20CSMCS20 :Linux Fundamentals	Linux Server Management and Security	Univ ersity of color ado	1.25	5	-	-	<a href="https://www.coursera.org/learn/linux-server-management-security">https://www.coursera.org/learn/linux-server-management-security</a>
<b>Group-IV(CS)</b>								
21	20CSMCS21: Introduction to Industry 4.0 and Industrial Internet of Things	Introduction to Industry 4.0 and Industrial Internet of Things	IITK GP		12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs66/preview">https://onlinecourses.nptel.ac.in/noc21_cs66/preview</a>
22	20CSMCS22 :IT Infrastructure	IT Infrastructure and Emerging Trends	Mani ssota	1.25	5 Weeks	-	-	<a href="https://www.coursera.org/learn/it-infrastructure-and-emerging-trends">https://www.coursera.org/learn/it-infrastructure-and-emerging-trends</a>
		System Administrati on and IT	Goog le	1.5	6 Weeks	-	-	<a href="https://www.coursera.org/learn/system-administration-it-infrastructure-services">https://www.coursera.org/learn/system-administration-it-infrastructure-services</a>

		Infrastructure Services						
23	20CSMCS23 : Capstone Project	Cyber security Capstone: Breach Response Case Studies	IBM	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/ibm-cybersecurity-breach-case-studies">https://www.coursera.org/learn/ibm-cybersecurity-breach-case-studies</a>
<b>Internet of Things</b>								
<b>Group-I(IOT)</b>								
1	20CSMIOT01: Programming in C++	Programming in C++	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs55/preview">https://onlinecourses.nptel.ac.in/noc21_cs55/preview</a>
2	20CSMIOT02: Programming in Java	Programming in Java	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs56/preview">https://onlinecourses.nptel.ac.in/noc21_cs56/preview</a>
3	20CSMIOT03: Python	Joy of computing using Python	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs75/preview">https://onlinecourses.nptel.ac.in/noc21_cs75/preview</a>
4	20CSMIOT04: Scripting-Shell/Java Script/Perl/PHP/HTML/Python	Programming Foundations with JavaScript, HTML and CSS	Duke University	1	4 Weeks	Considered from registered Date		<a href="https://www.coursera.org/learn/duke-programming-web">https://www.coursera.org/learn/duke-programming-web</a>
5	20CSMIOT05: Functional programming languages-Kotlin/Rust/Go/Haskell/Scala	Functional Programming Principles in Scala	EPFL	1.5	6 Weeks	Considered from registered Date		<a href="https://www.coursera.org/learn/progfun1?specialization=scala">https://www.coursera.org/learn/progfun1?specialization=scala</a>
6	20CSMIOT06: OOAD and Software Testing Methodologies	Object Oriented Analysis and Design	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs57/preview">https://onlinecourses.nptel.ac.in/noc21_cs57/preview</a>
		Software Testing	IITM	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://www.google.com/url?q=https://onlinecourses.nptel.ac.in/noc21_cs57/preview">https://www.google.com/url?q=https://onlinecourses.nptel.ac.in/noc21_cs57/preview</a>

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<b>Group-II(IOT)</b>								
7	20CSMIOT07: C programming and assembly language	C Programming and Assembly Language	IITM		4 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs81/preview">https://onlinecourses.nptel.ac.in/noc21_cs81/preview</a>
8	20CSMIOT08: Data Base Management System	Data Base Management System	IITK GP	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs58/preview">https://onlinecourses.nptel.ac.in/noc21_cs58/preview</a>
9	20CSMIOT09: Computer architecture and organization	Computer architecture and organization	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs61/preview">https://onlinecourses.nptel.ac.in/noc21_cs61/preview</a>
10	20CSMIOT10: Operating Systems	Introduction to Operating Systems	IITM	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs72/preview">https://onlinecourses.nptel.ac.in/noc21_cs72/preview</a>
11	20CSMIOT11: Data structures and Algorithms	Programming, Data Structures And Algorithms Using Python	CMI	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs67/preview">https://onlinecourses.nptel.ac.in/noc21_cs67/preview</a>
12	20CSMIOT12: Sensors and IOT devices (Applicable for Civil and Mechanical)	IOT Devices		1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/iot-devices-il">https://www.coursera.org/learn/iot-devices-il</a>
13	20CSMIOT13: Discrete Mathematics	Discrete Mathematics	IIT Ropar	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs80/preview">https://onlinecourses.nptel.ac.in/noc21_cs80/preview</a>

14	20CSMIOT14: Internet of things	Introduction to internet of things	IITK GP	3	12 Weeks	July 26, 2021	October 24, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs63/preview">https://onlinecourses.nptel.ac.in/noc21_cs63/preview</a>
<b>Group-III(IOT)</b>								
15	20CSMIOT15: Artificial Intelligence	Fundamentals Of Artificial Intelligence	IITG		12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_ge20/preview">https://onlinecourses.nptel.ac.in/noc21_ge20/preview</a>
16	20CSMIOT16: Development of Real Time systems	Development of Real Time systems	EIT Digital	1.25	5 Weeks	-	-	<a href="https://www.coursera.org/learn/real-time-systems">https://www.coursera.org/learn/real-time-systems</a>
17	20CSMIOT17: Remote Sensing and GIS	Remote Sensing and GIS	IITG	2	8 Weeks	August 23, 2021	October 24, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_ce61/preview">https://onlinecourses.nptel.ac.in/noc21_ce61/preview</a>
18	20CSMIOT18: Introduction and programming with IoT Boards	Introduction and programming with IoT Boards	Korea university	1.25	5 Weeks	-	-	<a href="https://www.coursera.org/learn/introduction-iot-boards">https://www.coursera.org/learn/introduction-iot-boards</a>
19	20CSMIOT19: Full stack Development	Front-End Web UI Frameworks and Tools: Bootstrap 4	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/bootstrap-4?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/bootstrap-4?specialization=full-stack-mobile-app-development</a>
		Front-End JavaScript Frameworks: Angular	The Hong Kong university of sci and tech	1	4	-	-	<a href="https://www.coursera.org/learn/angular?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/angular?specialization=full-stack-mobile-app-development</a>
		Server-side Development with NodeJS, Express and MongoDB	The Hong Kong university	1	4	-	-	<a href="https://www.coursera.org/learn/server-side-nodejs?specialization=full-stack-mobile-app-development">https://www.coursera.org/learn/server-side-nodejs?specialization=full-stack-mobile-app-development</a>

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20	20CSMIOT20: Agile Development methodologies	Agile Software Development	University of Minnesota	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/agile-software-development">https://www.coursera.org/learn/agile-software-development</a>
21	20CSMIOT21: Design for Internet of Things	Design for Internet of things	IISc	2	8 Weeks	-	-	<a href="https://onlinecourses.nptel.ac.in/noc21_ee85/preview">https://onlinecourses.nptel.ac.in/noc21_ee85/preview</a>
<b>Group-IV(IOT)</b>								
22	20CSMIOT22: Security in IOT	Industrial IoT Markets and Security	Colorado Boulder University	1.25	5 Weeks			<a href="https://www.coursera.org/learn/industrial-iot-markets-security">https://www.coursera.org/learn/industrial-iot-markets-security</a>
23	20CSMIOT23: Data Science for Engineers	Data Science for Engineers	IITM	2	8 Weeks	July 26, 2021	September 26, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs69/preview">https://onlinecourses.nptel.ac.in/noc21_cs69/preview</a>
24	20CSMIOT24: Machine Learning	Introduction to Machine Learning - IITM	IITM	3	12 Weeks	July 26, 2021	October 24, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs70/preview">https://onlinecourses.nptel.ac.in/noc21_cs70/preview</a>
25	20CSMIOT25: Introduction to Industry 4.0 and Industrial Internet of Things	Introduction to Industry 4.0 and Industrial Internet of Things	IITK GP	3	12 Weeks	July 26, 2021	October 23, 2021	<a href="https://onlinecourses.nptel.ac.in/noc21_cs66/preview">https://onlinecourses.nptel.ac.in/noc21_cs66/preview</a>
26	20CSMIOT26: Capstone	Internet of Things Capstone V2: Build a Mobile Surveillance System	UCSan Diego	1	4 Weeks	-	-	<a href="https://www.coursera.org/learn/internet-of-things-capstone-version2">https://www.coursera.org/learn/internet-of-things-capstone-version2</a>

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