

Courses for Selection

Note:

i. Scientific/Technical Assistant-A to Scientist -C: Select courses of total learning duration of 53 hrs or more.

ii. Scientist -D to Scientist -F: Select courses of total learning duration of 23 hrs or more.

Frontend(Annexure -1)

S. No.	Course Name	Lessons	Duration
1	SOLID principle of Object Oriented Design (5 hrs 4 min)	1. Introduction to SOLID	143 min
		2. SOLID Fundamentals	161 min
2	Ruby and Rails 2022 (12 hrs 24 min)	1. Ruby Full Stack Development Introduction	78 min
		2. Introduction to Rails	112 min
		3. Introduction to Models	122 min
		4. Introduction to Views	138 min
		5. Examining Rails APIs	142 min
		6. Advanced Rails	152 min
3	Application Development with React and Redux 2022 (13 hrs 5 min)	1. React and Flux An Overview	88 min
		2. React and Flux Creating Simple React Components	74 min
		3. React and Flux React Router and Forms	116 min
		4. React and Flux Working with Flux	92 min
		5. Build Apps Using React Introducing React for Web Applications	104 min
		6. Reactive Programming Using Redux	87 min
		7. Build Integrate React Applications with Redux Capabilities	85 min
		8. Enhance Reactive Applications with Advanced React	70 min
		9. Build and Test SPA Using React and Redux	69 min
4	Go Foundation For Beginners 2022 (4 hrs 43 min)	1. Getting Started with Go Introducing Go Programming Language	74 min
		2. Getting Started with Go Getting Started with Go Basic Programming	133 min
		3. Advanced Programming in Go Best Practices for Go Programming	76 min
5	Introduction to Swift Programming (5 hrs 34 min)	1. Swift Language Basics	184 min
		2. Using Swift Advanced Language Features	150 min
6	Programming with Kotlin 2022 (4 hrs 1 min)	1. Introduction to Kotlin	28 min
		2. Kotlin IDEs	27 min
		3. Kotlin Syntax	56 min
		4. Kotlin Loops and Functions	63 min
		5. Kotlin Objects and Classes	67 min

7	Developing ASP.NET MVC Web Applications 2022 (9 hrs 22 min)	1. ASPNET MVC Web Applications Introduction	46 min
		2. Configuring MVC Controllers and Actions	93 min
		3. MVC Application Routes	66 min
		4. ASPNET MVC Web Applications Models and Unit Testing	84 min
		5. ASPNET MVC Web Applications Databases Entity Framework	52 min
		6. ASPNET MVC Web Applications Web API Routes Controllers	46 min
		7. Composing the UI Layout of an Application	77 min
		8. Design and Implement UI Behaviour	51 min
		9. ASPNET MVC Web Applications Adaptive UI Layout and Caching Strategy	47 min
8	Multithreading and Concurrency in Java (7 hrs 54 min)	1. Multithreading Concurrency in Java Introduction to Concurrent Programming	79 min
		2. Multithreading and Concurrency in Java Spawning Launching Threads	90 min
		3. Multithreading and Concurrency in Java Thread Synchronization Locks	88 min
		4. Java Concurrency Multithreading and Concurrency in Java Concurrency the Producer Consumer Problem	51 min
		5. Multithreading and Concurrency in Java Objects for Concurrent Programming	82 min
		6. Multithreading and Concurrency in Java Scaling a Multithreaded Application	84 min
9	Java Certified Foundations Associate 2022 (22 hrs 16 min)	1. Java Certified Foundations Associate: Development Environment	49 min
		2. Java Certified Foundations Associate Concepts Features	56 min
		3. Java Certified Foundations Associate: Coding Best Practices	72 min
		4. Java Certified Foundations Associate Object Oriented Programming	61 min
		5. Java Certified Foundations Associate Design Patterns	101 min
		6. Java Certified Foundations Associate: Development Basics	117 min
		7. Java Certified Foundations Associate Basic Elements	64 min
		8. Java Certified Foundations Associate Java Operators	104 min
		9. Java Certified Foundations Associate Java Strings	92 min
		10. Java Certified Foundations Associate Math Random Classes	82 min
		11. Java Certified Foundations Associate Decision Statements	60 min
		12. Java Certified Foundations Associate Looping Statements	80 min
		13. Java Certified Foundations Associate: Debugging Exception Handling	69 min
		14. Java Certified Foundations Associate Arrays & Array Lists	59 min
		15. Java Certified Foundations Associate: Classes Constructors	80 min
		16. Java Certified Foundations Associate Data Types	94 min
		17. Java Certified Foundations Associate Java Methods	96 min

10	Vue.js 2022 (4 hrs 53 min)	1. Vue.js: Getting Started	54 min
		2. Vue.js: Working with Components	54 min
		3. Vue.js: Component Communication Routing	75 min
		4. Vue.js: Working with Vue State Data	50 min
		5. Vue.js: Working with Forms Unit Testing	60 min
11	Express.js 2022 (6 hrs 30 min)	1. Introduction to Express	110 min
		2. Using Express and Express Middleware	96 min
		3. MERN for FSD Development the MERN Stack FSD	72 min
		4. MERN Advanced MERN Development	112 min
12	Angular JS 2022 (5 hrs 56 min)	1. Angular 11 Getting Started with Angular	39 min
		2. Angular 11 Introduction to Components	35 min
		3. Angular 11 Working with Angular Modules	37 min
		4. Angular 11 Directives and Pipes	38 min
		5. Angular 11 Working with Nested Components	22 min
		6. Angular 11 Reactive Programming with Rx JS & Observables	19 min
		7. Angular 11 Working with Forms	44 min
		8. Angular 11 Navigation Routing in Angular	29 min
		9. Angular 11 Services Dependency Injection	27 min
		10. Angular 11 Security Deployment in Angular	45 min
		11. Final Exam Building Web Applications with Angular 11	21 min
13	User Experience (UX) Design Foundations (4 hrs 9 min)	1. UX Design Foundations Design Principles and Strategies	101m
		2. UX Design Foundations Techniques and Tools	64 min
		3. UX Design Foundations Navigation Layout and Content	84 min
14	UX Design Principles (2 hrs 48 min 18 sec)	1. Design Guidelines and Patterns	50 min 34 s
		2. Techniques and Tools	50 min 58s
		3. Navigation and Layout	21 min 59s
		4. Content Design	44 min 47s
15	Fundamentals of Eclipse (5 hrs 30 min)	1. Introduction to Eclipse	146 min
		2. Using Eclipse	116 min
		3. Using Eclipse with Subversive	68 min
16	Building Apps with MEAN Stack (4 hrs 11 min)	1. Developing and Deploying Web Applications with MEAN.js	131 min
		2. Securing Testing and Deploying MEAN Applications	120 min

17	CSS3, Sass and Less (9 hrs 48 min)	1. Styling Page Elements using CSS3	110 min
		2. Navigation Elements and Animations with CSS3	79 min
		3. Forms Positioning and Layout with CSS3	114 min
		4. Advanced Options Responsive Web Design and Management with CSS3	103 min
		5. Extending CSS3 with Sass and Less	96 min
		6. Creating Styles with CSS3 and Styling Text	86 min
18	UI/UX with Bootstrap4 (4 hrs 37 min)	1. Introduction To UI/UX	55 min
		2. UI Patterns and Troubleshooting	27 min
		3. Bootstrap Environment Requirements and Setup	63 min
		4. Bootstrap Forms and Layout	59 min
		5. Whole Page Controls and Extending Bootstrap	73 min
19	JavaScript Deep Dive (11 hrs 20 min)	1. JavaScript Introduction	60 min
		2. JavaScript Getting Started with JavaScript Programming	75 min
		3. JavaScript Types Operators Control Structures in JavaScript	72 min
		4. JavaScript Functions Arrays in JavaScript	105 min
		5. JavaScript Objects	92 min
		6. JavaScript Advanced Function Operations	43 min
		7. JavaScript Closures Prototypes	89 min
		8. JavaScript Working with the DOM Events	82 min
		9. JavaScript Form Validation Async Programming in JavaScript	62 min
20	Design Patterns in JavaScript (11 hrs 10 min)	1. JavaScript Introduction	77 min
		2. JavaScript Getting Started with JavaScript Programming	93 min
		3. JavaScript Types Operators Control Structures in JavaScript	80 min
		4. JavaScript Functions Arrays in JavaScript	144 min
		5. JavaScript Objects	123 min
		6. JavaScript Advanced Function Operations	79 min
		7. JavaScript Closures Prototypes	74 min

Backend (Annexure -2)

S. No.	Course Name	Lessons	Duration
1	Cypher Query Language (3 hrs 40 min)	1. Creating Nodes Relationships with Cypher	73 min
		2. Basic Reads Writes with Cypher	65 min
		3. Advanced Operations with Cypher	82 min
2	Graph Analytics with Neo4j (3 hrs 36 min)	1. An Introduction to Graph Databases Neo4j	107 min
		2. Administering a Neo4j Database	56 min
		3. Managing Databases with the Neo4j Browser	53 min
3	MSSQL 2022 (18 hrs 2 min)	1. Installing and Upgrading SQL Server 2016	109 min
		2. Components of a SQL Server 2016 Installation	119 min
		3. SQL Server Performance Settings	77 min
		4. SQL Server Instances and Storage Considerations	98 min
		5. Using Functions in SQL Server 2016	96 min
		6. Operators and Expressions in SQL Server 2016	95 min
		7. SQL Server 2016 Database Objects	108 min
		8. Filter and Modify Data in SQL Server 2016	141 min
		9. Aggregating Data in SQL Server 2016	114 min
		10. SQL Server 2016 Indexes and Views	125 min
4	NoSQL (6 hrs 9 min 10 sec)	1. Concepts and Background	74 min 26s
		2. Distributed Systems and Big Data	29 min 47s
		3. Models and Applications	70 min 02s
		4. Models and Data Stores	38 min 29s
		5. Programming Essentials	71 min 50s
		6. CouchDB CURL and Futon	31 min 09s
		7. NoSQL In Depth	53 min 27s
5	MariaDB (64 min 48 sec)	1. SQL Programming with MariaDB Getting Started with MariaDB for Data Analysis	64 min 48s
6	Raven DB (3 hrs 18 min 5 sec)	1. Raven DB Getting Started	23 min 34s
		2. Creating Documents	42 min 45s
		3. Updating and Patching Documents	53 min 55s
		4. Indexes	77 min 51s
7	MongoDB - 2024 (98min 34 sec)	1. Working with MongoDB Atlas An Introduction to MongoDB Atlas	98 min 34s
8	Apache Cassandra (84 min 46sec)	1. Working with Apache Cassandra Getting Started	84 min 46s
9	Apache H base (46 min 37sec)	1. HBase Installation	46 min 37s
10	Database Performance Tuning (65 min 24 sec)	1. Performance Tuning	65 min 24s

11	Database Business Intelligence (16 hrs 41 min 50 sec)	1. Designing BI Infrastructure	67 min 19s
		2. Implementing BI Infrastructure	59 min 16s
		3. Planning BI Infrastructure	51 min 10s
		4. BI Project Deployment	71 min 24s
		5. Preparing for BI Data Models	32 min 33s
		6. Designing BI Data Models	82 min 39s
		7. BI Data Model Partitions	36 min 02s
		8. BI Reporting and Analysis	48 min 48s
		9. BI Reporting Strategies	82 min 26s
		10. Integration Features and Installation	67 min 02s
		11. Planning and Configuration	66 min 19s
		12. MDX Queries	69 min 47s
		13. MDX Performance	55 min 59s
		14. Availability and Configuration	80 min 25s
		15. Recovery and Backup	42 min 28s
		16. Extract Transform and Load	88 min 13s
12	Big Data Fundamentals (1 hrs 27 min 35 sec)	1. Big Data Fundamentals	19 min 8s
		2. Evaluating Systems with Data Modelling	23 min 45s
		3. Finding the Quality in Your Data	23 min 36s
		4. Big Data Interpretation	21 min 6s

Systems Administration(Annexure -3)

S. No.	Course Name	Lessons	Duration
1	Unix Systems Administration 2022 (4 hrs 40 min)	1. Installing Unix	40 min
		2. Securing Unix Systems	65 min
		3. Unix Software Management	22 min
		4. Configuring Network Services	60 min
		5. Shell Scripting	59 min
		6. Unix Hardening and Maintenance	34 min
2	Ubuntu Systems Administration 2022 (5 hrs 35 min)	1. CompTIA Linux XK0004 Installing Ubuntu	34 min
		2. Essential Tools for Ubuntu	159 min
		3. Introduction to Ubuntu	142 min
3	CompTIA Linux+ XK0-004 Beginner (2023) (5 hrs 56 min)	1. CompTIA Linux XK0004 Introduction to Linux the Command Line	85 min
		2. CompTIA Linux XK0004 Managing Users Groups	47 min
		3. CompTIA Linux XK0004 File Access Permissions	58 min
		4. CompTIA Linux XK0004 Disk Partitions File Systems	58 min
		5. CompTIA Linux XK0004 Logical Volumes Filesystem Hierarchy	58 min
		6. CompTIA Linux XK0004 Using vim to Edit Files	50 min
4	Linux Exploits and Mitigation Controls 2023 (6 hrs 44 min)	1. Linux Exploits Mitigation Staging for Exploit Analysis	65 min
		2. Linux Exploits Mitigation Program Essentials	81 min
		3. Linux Exploits Mitigation String Vulnerability Analysis	70 min
		4. Linux Exploits Mitigation Memory and Pointer Vulnerabilities	71 min
		5. Linux Exploits Mitigation Penetration Tools	60 min
		6. Linux Exploits Mitigation Linux Exploit Architecture	57 min
5	Shell Scripting Essentials 2023 (5 hrs 11 min)	1. Introduction to Bash Scripting	88 min
		2. Bash Scripting Flow Control and Data Types	86 min
		3. Bash Advanced Scripting and File IO	73 min
		4. Automation Using Bash and Expect	64 min

AI/ML, Deep Learning (Annexure -4)

S. No.	Course Name	Lessons	Duration
1	Responsible Application and Guardrails for Generative AI (1 hrs 24 min 5 sec)	1. Navigating AI Ethical Challenges and Risks	29 min 41s
		2. Recognizing Hallucinations Inaccuracies and Bias in AI	27 min 17s
		3. Establishing AI Guardrails and Governance	27 min 07s
2	Azure AI Fundamentals (16 hrs 9 min 6 sec)	1. Artificial Intelligence and Machine Learning	103 min 31s
		2. Using Azure Machine Learning Studio	89 min 46s
		3. Machine Learning with Azure Services	110 min 41s
		4. Authoring with the Azure ML Studio Designer	70 min 16s
		5. Evaluating Models with the ML Designer	122 min 34s
		6. Anomaly Detection	87 min 45s
		7. Natural Language Processing	65 min 09s
		8. Creating a Conversational AI Bot	121 min 30s
		9. Computer Vision	82 min 31s
		10. Face and Optical Character Recognition	114 min 23s
3	Developing an AI/ML Data Strategy (3 hrs 27 min 37 sec)	1. The Data Analytics Maturity Model	39 min 27s
		2. Building an AI powered Workforce	45 min 44s
		3. Data Analytics Data Ethics	38 min 11s
		4. Aspects of a Robust AI Strategy	48 min 38s
		5. Data Bias and Ethical Considerations in AI	35 min 37s
4	Disruptive Technologies (48 min 25 sec)	1. Transforming the Workplace Using Artificial Intelligence	25 min 43s
		2. Connecting with the Internet of Things	22 min 42s
5	Machine Learning (3 hrs 12 min 33 sec)	1. Machine and Deep Learning Algorithms Introduction	45 min 19s
		2. Machine Deep Learning Algorithms Regression and Clustering	48 min 36s
		3. Machine and Deep Learning Algorithms Data Preparation in Pandas ML	63 min 41s
		4. Automation Design and Robotics	34 min 57s
6	AWS Certified Machine Learning - Specialty (11 hrs 13 min 26 sec)	1. Data Engineering Machine Learning and AWS	35 min 22s
		2. Amazon S3 Simple Storage Service	22 min 44s
		3. Data Movement	34 min 24s
		4. Data Pipelines and Workflows	40 min 46s
		5. Jupyter Notebook and Python	338 min 50s
		6. Data Analysis Fundamentals	34 min 02s

		7. Athena Quick Sight and EMR	36 min 46s
		8. Feature Engineering Overview	34 min 47s
		9. Feature Engineering Techniques	28 min 15s
		10. Problem Framing and Algorithm Selection	67 min 30s
7	Introduction to NumPy (2 hrs 6 min 13 sec)	1. Introduction to NumPy for Multidimensional Data	58 min 54s
		2. Advanced Operations with NumPy Arrays	67 min 19s
8	Introduction to Pandas (4 hrs 28 min 34 sec)	1. Introduction to Pandas and Data Frames	64 min 54s
		2. Manipulating Analysing Data in Pandas Data Frames	44 min 10s
		3. Using Pandas for Visualizations and Time Series Data	88 min 12s
		4. Pandas Advanced Features	71 min 18s
9	Data Visualization Using Seaborn (2 hrs 10 min 7 sec)	1. Basic Data Visualization Using Seaborn	66 min 18s
		2. Advanced Data Visualization Using Seaborn	63 min 49s
10	Deep Learning: Neural Networks (6 hrs)	1. Neural Networks	40 min
		2. Convolutional and Recurrent Neural Networks	41 min
		3. Improving Neural Networks Neural Network Performance Management	117 min
		4. Improving Neural Networks Loss Function Optimization	64 min
		5. Improving Neural Networks Data Scaling Regularization	98 min
11	Getting Started with Programming in Python (88 min 39 sec)	1. Getting Started with Programming in Python	88 min 39s
12	Natural Language Processing (Basics) (2 hrs 59 min 54 sec)	1. Natural Language Processing Getting Started with NLP	40 min 26s
		2. NLP for ML with Python NLP Using Python and NLTK	61 min 58s
		3. Deep Learning for NLP Introduction	77 min 30s

Python (Annexure -5)

S. No.	Course Name	Lessons	Duration
1	Flask in Python (5 hrs 12 min 17 sec)	1. An Introduction to Web Frameworks and Flask	49 min 8s
		2. Building a Simple Web Site Using Flask	89 min
		3. User Interactions in Flask Applications	80 min 54s
		4. User Authentication in a Flask Application	93 min 15s
2	Python Introduction (3 hrs 17 min 13 sec)	1. Working with Lists and Tuples in Python	99 min 1s
		2. Working with Dictionaries and Sets in Python	53 min 27s
		3. Shallow and Deep Copies in Python	44 min 45s
3	Functions in Python (4 hrs 55 min 51 sec)	1. Introduction	123 min 6s
		2. Gaining a Deeper Understanding of Python Functions	85 min 56s
		3. Working with Advanced Features of Python Functions	86 min 49s
4	Data Structures and Algorithms in Python (5 hrs 14 min 38 sec)	1. Fundamental Data Structures	79 min 8s
		2. Implementing Data Structures	89 min 36s
		3. Sorting Algorithms	74 min 57s
		4. Implementing Sorting Algorithms	70 min 57s
5	Python - OOPs Concepts (5 hrs 4 min)	1. Python Classes and Inheritance Introduction	50 min
		2. Python Classes Inheritance Getting Started with Classes in Python	95 min
		3. Python Classes Inheritance Working with Inheritance in Python	70 min
		4. Python Classes Inheritance Advanced Functionality Using Python Classes	89 min
6	Python - Web Development (5 hrs 13 min)	1. Flask in Python An Introduction to Web Frameworks Flask	50 min
		2. Flask in Python Building a Simple Web Site Using Flask	90 min
		3. Web Applications with Django Using Builtin and Custom Applications	103 min
		4. Web Applications with Django Working with Models	70 min

Cloud and Network(Annexure -6)

S. No.	Course Name	Lessons	Duration
1	Cloud Computing Technology Fundamentals 2023 (14 hrs 14 min)	1. Cloud Computing Fundamentals Overview	110 min
		2. Cloud Computing Fundamentals Virtualization and Data Centres	81 min
		3. Cloud Computing Fundamentals Storing and Managing Cloud Data	124 min
		4. Cloud Computing Fundamentals Migrating to the Cloud 1	66 min
		5. Cloud Computing Fundamentals Identity Presence and Privacy	100 min
		6. Cloud Computing Fundamentals Cloud Security	121 min
		7. Cloud Computing Fundamentals Cloud Virtualization Data Centres	75 min
		8. Cloud Computing Fundamentals Storing Managing Cloud Data	48 min
		9. Cloud Computing Fundamentals Cloud Protocols Standards	70 min
		10. Cloud Computing Fundamentals Migrating to the Cloud 2	59 min
2	CompTIA Cloud + (CV0-003) (25 hrs 23 min)	1. CompTIA Cloud CV0003 Cloud Architecture Models	71 min
		2. CompTIA Cloud CV0003 Cloud Capacity Planning	69 min
		3. CompTIA Cloud CV0003 Cloud High Availability Scaling	74 min
		4. CompTIA Cloud CV0003 Cloud Solution Design	74 min
		5. CompTIA Cloud CV0003 Cloud Identity Access Management	74 min
		6. CompTIA Cloud CV0003 Cloud Network Security	82 min
		7. CompTIA Cloud CV0003 Cloud Security Controls	70 min
		8. CompTIA Cloud CV0003 Data Security Compliance Controls	78 min
		9. CompTIA Cloud CV0003 Cloud Component Integration	71 min
		10. CompTIA Cloud CV0003 Provisioning Cloud Storage	84 min
		11. CompTIA Cloud CV0003 Cloud Network Deployments	79 min
		12. CompTIA Cloud CV0003 Cloud Migrations	68 min
		13. CompTIA Cloud CV0003 Cloud Logging Monitoring Alerting Optimization	84 min
		14. CompTIA Cloud CV0003 Cloud Operations Management	77 min
		15. CompTIA Cloud CV0003 Cloud Automation Orchestration	69 min
		16. CompTIA Cloud CV0003 Cloud Disaster Recovery	87 min
		17. CompTIA Cloud CV0003 Cloud Troubleshooting Methodologies	83 min
		18. CompTIA Cloud CV0003 Troubleshooting Cloud Security Issues	73 min
		19. CompTIA Cloud CV0003 Troubleshooting Cloud Deployments	89 min
		20. CompTIA Cloud CV0003 Troubleshooting Automation and Orchestration Issues	68 min
3	ELK Operations on the Cloud (86 min 54 sec)	1. ELK Operations on the Cloud	86 min 54s

4	Networking Core Concepts (19 hrs 6 min 39 Sec)	1.Decoding the Packet Header & Discovering ICMPv6	57 min 54s
		2.Exploring Addresses	75 min 26s
		3.Benefits & Allocating Addresses	47 min 9s
		4.Network Function Virtualization Fundamentals	23 min 34s
		5.Software-Defined Networking Fundamentals	60 min 53s
		6.Networking Tools	30 min 52s
		7.Network Types	67 min 8s
		8.Implementing Network Concepts	90 min 59s
		9.Network Hosts	62 min 2s
		10.CompTIA A+ 220-1001: Wireless Networking Protocols	56 min 21s
		11.CompTIA A+ 220-1001: Configuring a Wired/Wireless Network	82 min 22s
		12.CompTIA A+ 220-1001: Networking	67 min 58s
		13.Network Security and Emerging Technologies	47 min 47s
		14.Communication and Web Protocols	28 min 34s
		15.Routing and Wide Area Networks	55 min 9s
		16.TCP, UDP, Support and Management Protocols	59 min 9s
		17.IP Addressing and IPv4 Subnetting	53 min 8s
		18.Wireless LANs	34 min 13s
		19.Ethernet LANs and Switching	65 min 22s
		20.Networking Standards and Connections	80 min 39s
5	OpenStack (4 hrs 57 min 14 Sec)	1.Networking Service	33 min 46s
		2.The OpenStack Dashboard	16 min 11s
		3.Object Storage	34 min 28s
		4.Compute Configuration	70 min 7s
		5.Cloud Deployment	82 min 22s
		6.Services & Components	60 min 20s
6	IPv6 (7 hrs 41 min 2 Sec)	1.Exploring Addresses	75m 26s
		2. CCNA 2020: Static Routing.	123 min 45s
		3.Decoding the Packet Header & Discovering ICMPv6	57 min 54s
		4.Benefits & Allocating Addresses	47 min 9s
		5.IPv6 First Hop Security and AAA, ACL, uRPF, & CoPP Troubleshooting	74 min 26s
		6.IPv6 Addressing & Configuration	82 min 22s

Cyber Security (Annexure -7)

S. No.	Course Name	Lessons	Duration
1	Cloud Security (12 hrs 40 min 31 sec)	1. Basics of Cloud Operations	54 min 4s
		2. Architectural and Design Concepts	32 min 43s
		3. Cloud Infrastructure Security	58 min 39s
		4. Cloud Data Security	47 min 7s
		5. Cloud Application Security	43 min 58s
		6. Legal and Compliance	29 min 30s
		7. Presence and Privacy	34 min 29s
		8. Risk Management	56 min 3s
		9. Cloud Security Administration Introduction	65 min 41s
		10. Infrastructure Planning	55 min 31s
		11. Cloud Data Application Security	61 min
		12. Hardened Cloud Security	45 min 25s
		13. Continuous Operational Improvement	86 min 31s
		14. Regulatory Conformance	89 min 50s
2	Certified Cloud Security Professional (CCSP) 2019 (9 hrs 50 min)	1. CCSP 2019 Cloud System Architecture Design	55 min
		2. CCSP 2019 Secure Cloud Computing	82 min
		3. CCSP 2019 Data Security Technologies	37 min
		4. CCSP 2019 Implementing Data Discovery Classification	43 min
		5. CCSP 2019 Data Retention Events	30 min
		6. CCSP 2019 Cloud Infrastructure	46 min
		7. CCSP 2019 Data Center Security	62 min
		8. CCSP 2019 Application Development Security	72 min
		9. CCSP 2019 Identity Access Management	35 min
		10. CCSP 2019 Managing Securing Cloud Infrastructure	57 min
		11. CCSP 2019 Operational Controls Standards	41 min
3	Cloud Security Management 2023 (6 hrs 10 min)	1. Cloud Security Management Architecture Security	73 min
		2. Cloud Security Management Operations Security	85 min
		3. Cloud Security Management Data Security	49 min
		4. Cloud Security Management Risk Management	65 min
		5. Cloud Security Management Platform Infrastructure Security	50 min
		6. Cloud Security Management Legal Compliance	48 min

4	Cloud Security Fundamentals (8 hrs 31 min)	1. Cloud Security Fundamentals Basics of Cloud Operations	54 min
		2. Cloud Security Fundamentals Architectural Design Concepts	33 min
		3. Cloud Security Fundamentals Cloud Infrastructure Security	60 min
		4. Cloud Security Fundamentals Cloud Data Security	48 min
		5. Cloud Security Fundamentals Cloud Application Security	44 min
		6. Cloud Security Fundamentals Legal Compliance	30 min
		7. Cloud Computing Security Cloud Management	73 min
		8. Business Continuity Cloud Integration	64 min
		9. Business Continuity Secure Cloud Computing	49 min
		10. Final Exam Network Security Specialist	1 min
		11. Cloud Services Cloud Computing Concepts	58 min
5	Cloud Platform Security (6 hrs 38 min)	1. Cloud Platform Security Designing Secure Access	91 min
		2. Cloud Platform Security Infrastructure Protection	93 min
		3. Cloud Platform Security System Monitoring Protection	90 min
		4. Cloud Platform Security Incident Response Remediation	70 min
		5. Cloud Platform Security Platform Infrastructure Security	53 min
		6. Final Exam Cloud Security Architect	1 min
6	Cryptography 2024 (4 hrs 47 min 42 sec)	1. Introduction to Cryptography Services	56 min 23 s
		2. Securing Information using Cryptography	80 min 25 s
		3. CompTIA Linux Security Threats and Cryptography	84 min 45 s
		4. Cryptography Introduction to PKI	66 min 9 s
7	Mobile Security Administration (6 hrs 57 min 19 sec)	1. Mobile security threats	81 min 07s
		2. Mobile Device Security Handling	24 min 58s
		3. Mobile Security Technologies	54 min 52s
		4. Mobile Security Threat Mitigation	61 min 23s
		5. Containers and Wrappers	23 min 14s
		6. Configuring Enterprise level Security	72 min 33s
		7. Understanding Mobile Devices Information Security and Social Trend	61 min 46s
		8. Infrastructure Security	37 min 26s
8	Network security - CCNP: Security (16 hrs 49 min 55 sec)	1. Security Basics and Common Threats	58 min 35s
		2. Security Vulnerabilities Attack Mitigations and Cryptographic Solutions	77 min 21s
		3. PKI and IKE	48 min 22s
		4. VPNs Security Intelligence Social Engineering Attacks	74 min 32s

		5. SDN APIs Security Appliance API Calls	39 min 30s
		6. Security Models Frameworks	60 min 46s
		7. DHCP Snooping DAI IP Source Guard Private VLANs Storm Control	71 min 10s
		8. Port Security VLAN Hopping Network Hardening Access Control	57 min 29s
		9. Network Access Secure Network Management	47 min 59s
		10. Configuring and Verifying VPN IPsec	66 min 35s
		11. Cloud Deployment Service Models Responsibilities Security	61 min 22s
		12. Cisco Firepower Traffic Management Identity Authentication	62 min 54s
		13. Working with ESA CES WSA	74 min 22s
		14. Cisco Umbrella Endpoint Security	52 min 56s
		15. MDM MFA Endpoint Solutions	62 min 52s
		16. Guest Services BYOD 8021X CoA	43 min 28s
		17. Device Compliance Exfiltration Telemetry Security Products	49 min 42s

DevOps (Annexure -8)

S. No.	Course Name	Lessons	Duration
1	Core and Foundation-Level Learning (7 hrs 26 min 1 sec)	1. Moving toward DevOps	96 min 22 s
		2. Continuous Principles	88 min 29 s
		3. Case Studies in DevOps	67 min 22 s
		4. DevOps Principles Practices	97 min 26 s
		5. Moving toward DevOps	96 min 22 s
2	Docker (Beginner) (7 hrs 12 min)	1. DevOps with Docker Container Management	53 min
		2. DevOps with Docker Implementing DevOps Using Docker	71 min
		3. DevOps with Docker Management in the Cloud	67 min
		4. Docker Compose Terminology Installation	56 min
		5. Docker Compose Using Docker Compose	66 min
		6. Using Docker for DevOps Configuring Docker for Continuous Delivery	51 min
		7. Using Docker for DevOps Introduction to Docker	68 min
3	Using Jenkins for DevOps 2023 (2 hrs 9 min)	1. Jenkins for DevOps Automated Testing Advanced Jobs Using Jenkins	68 min
		2. Jenkins for DevOps Jenkins Configuration for DevOps	61 min
4	Kubernetes Basics (6 hrs 46 min)	1. Introduction to Kubernetes	81 min
		2. Kubernetes Concepts	150 min
		3. Kubernetes Clusters	175 min
5	Fundamentals of DevOps (4 hrs 21 min)	1. DevOps Methodologies and Development	73 min
		2. DevOps Management and Capabilities	81 min
		3. DevOps Testing and Delivery	107 min
6	Using Docker for DevOps 2023 (7 hrs 3 min)	1. Using Docker Benefits and Installation	117 min
		2. Using Docker Dockerizing Applications	122 min
		3. Using Docker Customizing and Clustering	124 min
		4. Automated Testing with Docker	60 min
7	DevOps with Ansible and Salt Stack 2023 (5 hrs 32 min)	1. DevOps with Ansible Overview	46 min
		2. DevOps with Ansible Introduction to Playbooks and Testing	68 min
		3. DevOps with Ansible Working with Ansible Features	72 min
		4. DevOps with Saltstack Overview	41 min
		5. DevOps with Saltstack Configuration and Components	44 min
		6. DevOps with Saltstack Remote Execution State System	61 min

8	Technologies for DevOps Engineers 2023 (3 hrs)	1. DevOps Support Administrator Exploring Cloud Service Models	65 min
		2. DevOps Support Administrator DevOps Practices for Support Engineers	41 min
		3. DevOps Support Administrator DevOps Tools for Support Engineers	74 min
9	Docker for Java Microservices (5 hrs 11 min)	1.. Docker for Java Microservices Working with Docker Components	97 min
		2. Docker for Java Microservices Containerize Microservices	78 min
		3. Docker for Java Microservices Managing Microservices on Docker Using Compose	70 min
		4. Docker for Java Microservices Scaling Up and Managing Microservices	66 min
10	DevOps Automation Across Platforms (2 hrs 37 min)	1. DevOps Automation Across Platforms CloudOps for Multicloud Deployments	88 min
		2. DevOps Automation Across Platforms Working with Multicloud Tools	69 min

MicroServices and IoT(Annexure -9)

S. No.	Course Name	Lessons	Duration
1	Basics of Microservices Architecture (7 hrs 30 min 4 sec)	1. Basic Concepts of a Microservices Architecture	41 min 56s
		2. Microservices Architecture	87 min 59s
		3. Microservices Containers	79 min 43s
		4. Microservices Deployment and Continuous Integration	107 min
		5. Microservices Testing Strategies Scaling Monitoring and Security	133 min 26s
2	Microservices 2023 (5 hrs 27 min)	1. Microservices Deep Dive	57 min
		2. Microservice Refactoring Patterns	54 min
		3. Introduction to Microservices	82 min
		4. Securing Microservices	65 min
		5. Advanced Microservices Patterns	69 min
3	Basics of Microservices (7 hrs 59 min)	1. Introduction to Microservices	82 min
		2. Microservices Deep Dive	57 min
		3. Advanced Microservices Patterns	69 min
		4. Microservice Refactoring Patterns	54 min
		5. Docker for Java Microservices Scaling Up and Managing Microservices	66 min
		6. Microservices Current and Future Trends	58 min
		7. Designing the Microservices Architecture	93 min
4	Developing and Implementing IoT Solutions (6 hrs 34 min)	1. Developing and Implementing IoT Solutions Principles of IoT and Python Basics	70 min
		2. Developing and Implementing IoT Solutions Micro Python Board	42 min
		3. Developing and Implementing IoT Solutions Micro Python and Security	53 min
		4. Developing and Implementing IoT Solutions Using Raspberry Pi and OpenCV	31 min
		5. Developing and Implementing IoT Solutions Raspi config and GPIO	36 min
		6. Developing and Implementing IoT Solutions Arduino Language	47 min
		7. Developing and Implementing IoT Solutions Cloud Implementation Using Azure IoT	57 min
		8. Developing and Implementing IoT Solutions Azure IoT Hub	58 min

Data Science and Data Analytics (Annexure -10)

S. No.	Course Name	Lessons	Duration
1	Getting Started with R Programming (6 hrs 28 min)	1. R Programming for Beginners Getting Started	91 min
		2. R Programming for Beginners Exploring R Vectors	88 min
		3. R Programming for Beginners Leveraging with Matrices Arrays Lists	96 min
		4. R Programming for Beginners Understanding Data Frames Factors Strings	113 min
2	Overview of Statistical Analysis and Modeling in R (9 hrs 48 min)	1. Statistical Analysis and Modeling in R Working with Probability Distributions	98 min
		2. Statistical Analysis and Modeling in R Understanding Interpreting Statistical Tests	64 min
		3. Statistical Analysis and Modeling in R Statistical Analysis on Your Data	127 min
		4. Statistical Analysis and Modeling in R Performing Regression Analysis	60 min
		5. Statistical Analysis and Modeling in R Performing Classification	97 min
		6. Statistical Analysis and Modeling in R Performing Clustering	50 min
		7. Statistical Analysis and Modeling in R Building Regularized Models Ensemble Models	92 min
3	Data Science Core Concepts (7 hrs 9 min 27 sec)	1. Data Gathering	67 min 14s
		2. Data Filtering	56 min 22s
		3. Data Transformation	42 min 58s
		4. Data Integration	37 min 32s
		5. Estimates and Measures	32 min 21s
		6. Clustering Errors and Validation	33 min 17s
		7. Data Communication and Visualization	72 min 49s
		8. Data Science Tools	47 min 15s
		9. The Four Vs of Data	39 min 39s
4	R for Data Science (4 hrs 55 min 3 sec)	1. R Data Structures	51 min 47s
		2. Importing Exporting Data using R	33 min 32s
		3. Data Exploration using R	40 min
		4. R Regression Methods	36 min 36s
		5. R Classification and Clustering	38 min 42s
		6. R for Data Science Data Visualization	32 min 19s
		7. Cleaning Data in R	62 min 7s